

Safety Data Sheet

acc. to OSHA HCS

Printing date 03/16/2022

Reviewed on 03/16/2022

1 Identification

- **Product identifier**
- **Trade name:** Sodium Hydroxide, Pellets, Reagent, A.C.S.
- **Article number:** 21160, 21160-sp, 21162
- **CAS Number:**
1310-73-2
- **EC number:**
215-185-5
- **Index number:**
011-002-00-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Corrosive to Metals 1 H290 May be corrosive to metals.
 Skin Corrosion 1A H314 Causes severe skin burns and eye damage.
 Eye Damage 1 H318 Causes serious eye damage.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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· **Precautionary statements**

- Keep only in original container.
- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Call a poison center/doctor if you feel unwell.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see on this label).
- Wash contaminated clothing before reuse.
- Absorb spillage to prevent material damage.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

· **Identification number(s)**

· **EC number:** 215-185-5

· **Index number:** 011-002-00-6

4 First-aid measures

· **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

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- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**
- **PAC-1:** 0.5 mg/m³
- **PAC-2:** 5 mg/m³
- **PAC-3:** 50 mg/m³

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

PEL	Long-term value: 2 mg/m ³
REL	Ceiling limit value: 2 mg/m ³
TLV	Ceiling limit value: 2 mg/m ³

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Pellets

Color: White

· **Odor:** Odorless

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: 323 °C (613.4 °F)

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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Boiling point/Boiling range:	1,388 °C (34.588 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 800 °C (1,472 °F):	3.5 hPa (2.6 mm Hg)
· Density at 20 °C (68 °F):	2.13 g/cm ³ (17.77485 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water at 20 °C (68 °F):	420 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral	LD50	2,000 mg/kg (rat)
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· Primary irritant effect:

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effects known.

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- **Additional toxicological information:**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety Health Administration)** Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|----------------------------------|------------------------------|
| · UN-Number | |
| · DOT, ADR, IMDG, IATA | UN1823 |
| · UN proper shipping name | |
| · DOT | Sodium hydroxide, solid |
| · ADR | 1823 SODIUM HYDROXIDE, SOLID |
| · IMDG, IATA | SODIUM HYDROXIDE, SOLID |

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· **Transport hazard class(es)**· **DOT**

· **Class** 8 Corrosive substances
 · **Label** 8

· **ADR, IMDG, IATA**

· **Class** 8 Corrosive substances
 · **Label** 8

· **Packing group**· **DOT, ADR, IMDG, IATA** II· **Environmental hazards:** Not applicable.· **Special precautions for user** Warning: Corrosive substances· **Hazard identification number (Kemler code):** 80· **EMS Number:** 8-06· **Segregation groups** Alkalis· **Stowage Category** A· **Segregation Code** SG35 Stow "separated from" SGG1-acids

· **Transport in bulk according to Annex II of
 MARPOL 73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**· **DOT**

· **Quantity limitations** On passenger aircraft/rail: 15 kg
 On cargo aircraft only: 50 kg

· **Hazardous substance:** 1000 lbs, 454 kg· **ADR**

· **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 500 g

· **IMDG**

· **Limited quantities (LQ)** 1 kg
 · **Excepted quantities (EQ)** Code: E2
 Maximum net quantity per inner packaging: 30 g
 Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":** UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

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15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):** Substance is not listed.

· **Section 313 (Specific toxic chemical listings):** Substance is not listed.

· **TSCA (Toxic Substances Control Act):** ACTIVE

· **Hazardous Air Pollutants** Substance is not listed.

· **Proposition 65**

· **Chemicals known to cause cancer:** Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.

· **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.

· **Chemicals known to cause developmental toxicity:** Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)** Substance is not listed.

· **TLV (Threshold Limit Value)** Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** Danger

· **Hazard statements**

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep only in original container.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosive resistant container with a resistant inner liner.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:**

· **Date of preparation / last revision** 03/16/2022 / -

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

*OSHA: Occupational Safety **Health***

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Corrosive to Metals 1: Corrosive to metals – Category 1

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Corrosion 1A: Skin corrosion/irritation – Category 1A

Eye Damage 1: Serious eye damage/eye irritation – Category 1

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according to WHS Regulations

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Revision: 16.03.2022

1 Identification

· **Product identifier**

· **Trade name:** Sodium Hydroxide, Pellets, Reagent, A.C.S.

· **Article number:** 21160, 21160-sp, 21162

· **CAS Number:**

1310-73-2

· **EC number:**

215-185-5

· **Index number:**

011-002-00-6

· **Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

ProSciTech Pty Ltd

11 Carlton Street, Kirwan QLD 4817 Australia

Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)

Website: ems.proscitech.com

Emgrid Australia Pty. Ltd.

P.O. Box 118

The Patch VIC 3792

Australia

Tel: 03 9752 1785

Fax: 03 9752 1784

Website: www.emgrid.com.au

· **Further information obtainable from:** Product safety department

· **Emergency telephone number:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

2 Hazard(s) Identification

· **Classification of the substance or mixture**



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

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Acute Tox. 4 H302 Harmful if swallowed.

· **Label elements**

· **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

· **Hazard statements**

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep only in original container.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Store locked up.

Store in corrosive resistant container /container with a corrosion resistant inner liner.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

3 Composition and Information on Ingredients

· **Chemical characterisation: Substances**

· **CAS No. Description**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

· **Identification number(s)**

· **EC number:** *215-185-5*

· **Index number:** *011-002-00-6*

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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4 First Aid Measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

AU

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8 Exposure controls and personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

WES | Peak limitation: 2 mg/m³

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Pellets

Colour: White

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value:** Not applicable.

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· Change in condition	
Melting point/freezing point:	323 °C
Initial boiling point and boiling range:	1,388 °C
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 800 °C:	3.5 hPa
· Density at 20 °C:	2.13 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water at 20 °C:	420 g/l
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

Oral	LD50	2,000 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

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· **Additional toxicological information:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **UN-Number**

· **ADG, IMDG, IATA**

UNI823

· **UN proper shipping name**

· **ADG**

· **IMDG, IATA**

1823 SODIUM HYDROXIDE, SOLID

SODIUM HYDROXIDE, SOLID

· **Transport hazard class(es)**

· **ADG, IMDG, IATA**



· **Class**

· **Label**

8 Corrosive substances.

8

(Contd. on page 7)

Safety Data Sheet

according to WHS Regulations

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 6)

· Packing group · ADG, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 80 8-06 Alkalis A SG35 Stow "separated from" SGG1-acids
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG · Limited quantities (LQ) · Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· Transport category · Tunnel restriction code	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Australian Inventory of Industrial Chemicals** Substance is listed.
- **Standard for the Uniform Scheduling of Medicines and Poisons S5, S6, S10**
- **Australia: Priority Existing Chemicals** Substance is not listed.
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
- **Precautionary statements**
Keep only in original container.

(Contd. on page 8)

AU

Safety Data Sheet according to WHS Regulations

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 7)

Do not breathe dusts or mists.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Wear protective gloves/protective clothing/eye protection/face protection.
 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
 Continue rinsing.
 Immediately call a POISON CENTER/doctor.
 Specific treatment (see on this label).
 Wash contaminated clothing before reuse.
 Absorb spillage to prevent material damage.
 Store locked up.
 Store in corrosive resistant container /container with a corrosion resistant inner liner.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:**
- **Abbreviations and acronyms:**
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Met. Corr. 1: Corrosive to metals – Category 1
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1

AU

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

1 Identification

- **Product identifier**
- **Trade name:** Sodium Hydroxide, Pellets, Reagent, A.C.S.
- **Article number:** 21160, 21160-sp, 21162
- **CAS Number:**
1310-73-2
- **EC number:**
215-185-5
- **Index number:**
011-002-00-6
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazard identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Corrosive to Metals - Category 1 H290 May be corrosive to metals.
 Skin Corrosion - Category 1A H314 Causes severe skin burns and eye damage.
 Serious Eye Damage - Category 1 H318 Causes serious eye damage.



GHS07

Acute Toxicity (Oral) - Category 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.

(Contd. on page 2)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 1)

· **Precautionary statements**

- Keep only in original packaging.
- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.
- If swallowed: Call a poison center/doctor if you feel unwell.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see on this label).
- Wash contaminated clothing before reuse.
- Absorb spillage to prevent material-damage.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



3 Composition/Information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

· **Identification number(s)**

· **EC number:** 215-185-5

· **Index number:** 011-002-00-6

4 First-aid measures

· **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 2)

- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

EL Ceiling: 2 mg/m³

EV Ceiling: 2 mg/m³

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 4)

CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 3)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Pellets
Color:	White
Odor:	Odorless
Odor threshold:	Not determined.

· **pH-value:** Not applicable.

· Change in condition

Melting point/Melting range:	323 °C
Boiling point/Boiling range:	1,388 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Not determined.

· **Danger of explosion:** Product does not present an explosion hazard.

(Contd. on page 5)

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 4)

· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 800 °C:	3.5 hPa
· Density at 20 °C:	2.13 g/cm ³
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water at 20 °C:	420 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	2,000 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.

CA

(Contd. on page 6)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 5)


12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT/TDG, ADR, IMDG, IATA | <p style="margin: 0;">UN1823</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT/TDG · ADR · IMDG, IATA | <p style="margin: 0;">Sodium hydroxide, solid</p> <p style="margin: 0;">1823 SODIUM HYDROXIDE, SOLID</p> <p style="margin: 0;">SODIUM HYDROXIDE, SOLID</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT/TDG (Transport dangerous goods): | <div style="display: flex; align-items: center; margin-top: 10px;">  <p style="margin: 0;">8 Corrosive substances</p> </div> |
| <ul style="list-style-type: none"> · Class · Label | <p style="margin: 0;">8</p> |

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Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 6)

· **ADR, IMDG, IATA**

· Class	8 Corrosive substances
· Label	8
· Packing group	
· DOT/TDG, ADR, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Corrosive substances
· Hazard identification number (Kemler code):	80
· EMS Number:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT/TDG	
· Quantity limitations	On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg
· Hazardous substance:	1000 lbs, 454 kg
· ADR	
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** ACTIVE
- **Canadian substance listings:**
- **Canadian Domestic Substances List (DSL)** Substance is listed.
- **Canadian Non-Domestic Substances List (NDSL)** Substance is not listed.
- **Canadian Ingredient Disclosure list (limit 0.1%)** Substance is not listed.
- **Canadian Ingredient Disclosure list (limit 1%)** Substance is listed.

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-CA

Safety Data Sheet

according to HPR, Schedule 1

Printing date 03/16/2022

Reviewed on 03/16/2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 7)

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

· **Hazard statements**

May be corrosive to metals.

Harmful if swallowed.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Keep only in original packaging.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material-damage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:**

· **Date of the latest revision of the safety data sheet** 03/16/2022 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Sodium Hydroxide, Pellets, Reagent, A.C.S.
- **Article number:** 21160, 21160-sp, 21162
- **CAS Number:**
1310-73-2
- **EC number:**
215-185-5
- **Index number:**
011-002-00-6
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 Hazards identification

- **Classification of the substance or mixture**



Met. Corr. 1 H290 May be corrosive to metals.
 Skin Corr. 1A H314 Causes severe skin burns and eye damage.
 Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.
 Aquatic Acute 3 H402 Harmful to aquatic life.

- **Label elements**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 1)

- **Signal word** *Danger*
- **Hazard statements**
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Harmful to aquatic life.
- **Precautionary statements**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**
1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.
- **Identification number(s)**
- **EC number:** 215-185-5
- **Index number:** 011-002-00-6

4 First aid measures

- **Description of first aid measures**
- **General information:** *Immediately remove any clothing soiled by the product.*
- **After inhalation:** *In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:** *Drink plenty of water and provide fresh air. Call for a doctor immediately.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *No special measures required.*

IL

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 2)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Thorough dedusting.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 3)

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:**

· Form:	Pellets
· Colour:	White
· Odour:	Odourless
· Odour threshold:	Not determined.

· **pH-value:** Not applicable.· **Change in condition**

· Melting point/freezing point:	323 °C
· Initial boiling point and boiling range:	1,388 °C

· **Flash point:** Not applicable.· **Flammability (solid, gas):** Product is not flammable.· **Decomposition temperature:** Not determined.· **Auto-ignition temperature:** Not determined.· **Explosive properties:** Product does not present an explosion hazard.· **Explosion limits:**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure at 800 °C:** 3.5 hPa

· Density at 20 °C:	2.13 g/cm ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.

· **Solubility in / Miscibility with water at 20 °C:** 420 g/l· **Partition coefficient: n-octanol/water:** Not determined.· **Viscosity:**

· Dynamic:	Not applicable.
· Kinematic:	Not applicable.

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Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

Oral	LD50	2,000 mg/kg (rat)
------	------	-------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022


Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UNI823
· UN proper shipping name · ADR · IMDG, IATA	1823 SODIUM HYDROXIDE, SOLID SODIUM HYDROXIDE, SOLID
· Transport hazard class(es) · ADR, IMDG, IATA	
	
· Class · Label	8 Corrosive substances. 8
· Packing group · ADR, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Segregation groups · Stowage Category · Segregation Code	Warning: Corrosive substances. 80 8-06 Alkalis A SG35 Stow "separated from" SGG1-acids
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· Transport category · Tunnel restriction code	2 E

(Contd. on page 7)

IL

Safety data sheet

according to 1907/2006/EC, Article 31

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	<p>1 kg Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 1823 SODIUM HYDROXIDE, SOLID, 8, II</p>

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** *Danger*
- **Hazard statements**
May be corrosive to metals.
Harmful if swallowed.
Causes severe skin burns and eye damage.
Harmful to aquatic life.
- **Precautionary statements**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Contact:**
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic

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Safety data sheet
according to 1907/2006/EC, Article 31

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*vPvB: very Persistent and very Bioaccumulative**Met. Corr. 1: Corrosive to metals – Category 1**Acute Tox. 4: Acute toxicity – Category 4**Skin Corr. 1A: Skin corrosion/irritation – Category 1A**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3*

IL

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Sodium Hydroxide, Pellets, Reagent, A.C.S.
- **Article number:** 21160, 21160-sp, 21162
- **CAS Number:**
1310-73-2
- **EC number:**
215-185-5
- **Index number:**
011-002-00-6
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** *Danger*

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 1)

- **Hazard statements**

- H290 May be corrosive to metals.*
- H302 Harmful if swallowed.*
- H314 Causes severe skin burns and eye damage.*

- **Precautionary statements**

- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P310 Immediately call a POISON CENTER/doctor.*
- P321 Specific treatment (see on this label).*
- P405 Store locked up.*
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**

- **CAS No. Description**

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.

- **Identification number(s)**

- **EC number:** 215-185-5

- **Index number:** 011-002-00-6

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

- **5.3 Advice for firefighters**

- **Protective equipment:** No special measures required.

GB

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2022

Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 2)

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Thorough dedusting.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

· Ingredients with limit values that require monitoring at the workplace:
--

1310-73-2 Sodium Hydroxide, Pellets, Reagent, A.C.S.
--

WEL	Short-term value: 2 mg/m ³
-----	---------------------------------------

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 3)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Pellets
Colour:	White
Odour:	Odourless
Odour threshold:	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/freezing point:	323 °C
Initial boiling point and boiling range:	1,388 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Product is not flammable.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

· **Vapour pressure at 800 °C:** 3.5 hPa

Density at 20 °C:	2.13 g/cm ³
Relative density	Not determined.
Vapour density	Not applicable.
Evaporation rate	Not applicable.

· **Solubility in / Miscibility with water at 20 °C:** 420 g/l

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.

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Safety data sheet

according to 1907/2006/EC, Article 31

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Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 4)

· **9.2 Other information**

No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity**
Harmful if swallowed.
- | | | |
|--|------|-------------------|
| · LD/LC50 values relevant for classification: | | |
| Oral | LD50 | 2,000 mg/kg (rat) |
- **Primary irritant effect:**
 - **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
 - **Serious eye damage/irritation**
Causes serious eye damage.
 - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
 - **Additional toxicological information:**
 - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **Reproductive toxicity** Based on available data, the classification criteria are not met.
 - **STOT-single exposure** Based on available data, the classification criteria are not met.
 - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
 - **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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Safety data sheet
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Revision: 16.03.2022

Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

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· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packaging:

· Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN1823

· 14.2 UN proper shipping name

· ADR

1823 SODIUM HYDROXIDE, SOLID

· IMDG, IATA

SODIUM HYDROXIDE, SOLID

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class

8 Corrosive substances.

· Label

8

· 14.4 Packing group

· ADR, IMDG, IATA

II

· 14.5 Environmental hazards:

Not applicable.

· 14.6 Special precautions for user

Warning: Corrosive substances.

· Hazard identification number (Kemler code):

80

· EMS Number:

8-06

· Segregation groups

Alkalis

· Stowage Category

A

· Segregation Code

SG35 Stow "separated from" SGG1-acids

· 14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

1 kg

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· Transport category

2

· Tunnel restriction code

E

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Safety data sheet
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Trade name: Sodium Hydroxide, Pellets, Reagent, A.C.S.

(Contd. of page 6)

· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 g
	Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I Substance is not listed.**
- **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 16.03.2022

Revision: 16.03.2022

PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

· 1.1 Produktidentifikator

- Handelsnavn: natriumhydroxid
- Artikelnummer: 21160, 21160-sp, 21162
- CAS-nummer:
1310-73-2
- EC-nummer:
215-185-5
- Indeksnummer:
011-002-00-6

· 1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes

Der står ingen yderligere, relevante informationer til rådighed.

- Stoffets/præparatets anvendelse Laboratoriekemikalier

· 1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet

· Producent/leverandør

Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com

- For yderligere information: Product safety department

· 1.4 Nødtelefon:

ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

PUNKT 2: Fareidentifikation

· 2.1 Klassificering af stoffet eller blandingen

- Klassificering i henhold til forordning (EF) nr. 1272/2008



GHS05 ætsning

Met. Corr.1 H290 Kan ætse metaller.

Skin Corr. 1A H314 Forårsager svære ætsninger af huden og øjenskader.

Eye Dam. 1 H318 Forårsager alvorlig øjenskade.



GHS07

Acute Tox. 4 H302 Farlig ved indtagelse.

· 2.2 Mærkningselementer

- Mærkning i henhold til forordning (EF) nr. 1272/2008

Denne substans er klassificeret og mærket iht. CLP-forordningen.

- Farepiktogrammer



GHS05

GHS07

- Signalford Fare

(Fortsættes på side 2)

Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 16.03.2022

Revision: 16.03.2022

Handelsnavn: natriumhydroxid

(Fortsat fra side 1)

- **Faresætninger**

- H290 Kan ætse metaller.
- H302 Farlig ved indtagelse.
- H314 Forårsager svære ætsninger af huden og øjenskader.

- **Sikkerhedssætninger**

- P303+P361+P353 VED KONTAKT MED HUDEN (eller håret): Tilsmudset tøj tages straks af/fjernes. Skyl [eller brus] huden med vand.
- P305+P351+P338 VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.
- P310 Ring omgående til en GIFTINFORMATION/læge.
- P321 Særlig behandling (se på denne etiket).
- P405 Opbevares under lås.
- P501 Bortskaffelse af indholdet/beholderen i henhold til de lokale/regionale/nationale/internationale forskrifter.

- **2.3 Andre farer**

- **Resultater af PBT- og vPvB-vurdering**

- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.

PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

- **3.1 Kemisk betegnelse: Stoffer**

- **CAS-nr. betegnelse**

1310-73-2 natriumhydroxid

- **Identifikationsnummer (-numre)**

- **EC-nummer:** 215-185-5

- **Indeksnummer:** 011-002-00-6

PUNKT 4: Førstehjælpsforanstaltninger

- **4.1 Beskrivelse af førstehjælpsforanstaltninger**

- **Generelle anvisninger:** Tøj, der er forurennet med produktet, skal tages af med det samme.
- **Efter indånding:** I tilfælde af bevidstløshed skal den tilskadedekomne lægges ned og transporteres i stabilt sideleje.
- **Efter hudkontakt:** Skal omgående vaskes af med vand og sæbe, skyl godt efter.
- **Efter øjenkontakt:** Skyl øjnene med åbent øjnlæg i flere minutter under rindende vand og søg læge.
- **Efter indtagelse:** Drik rigeligt vand og sørg for frisk luft. Tilkald omgående læge.

- **4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede**

Der står ingen yderligere, relevante informationer til rådighed.

- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**

Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 5: Brandbekæmpelse

- **5.1 Slukningsmidler**

- **Egnede slukningsmidler:** Tilpas foranstaltningerne til brandbekæmpelse efter omgivelserne.

- **5.2 Særlige farer i forbindelse med stoffet eller blandingen**

Der står ingen yderligere, relevante informationer til rådighed.

- **5.3 Anvisninger for brandmandskab**

- **Særlige værnemidler:** Der kræves ingen særlige forholdsregler.

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PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer**
Bær beskyttelsesudstyr. Hold ubeskyttede personer borte.
- **6.2 Miljøbeskyttelsesforanstaltninger:** Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**
Brug neutraliseringsmiddel.
Kontamineret materiale skal bortskaffes som affald ifølge punkt 13.
Sørg for tilstrækkelig udluftning.
- **6.4 Henvisning til andre punkter**
Information om sikker håndtering se kapitel 7.
Informationer vedrørende personlige værnemidler se kapitel 8.
Informationer om bortskaffelse se kapitel 13.

PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering** God afstøvning.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Der kræves ingen særlige forholdsregler.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Ikke påkrævet.
- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **8.1 Kontrolparametre**
- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.

· **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:**

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GV	Loftværdi: 2 mg/m ³
L	

- **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

- **8.2 Eksponeringskontrol**
- **Personlige værnemidler:**
- **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**
Skal holdes borte fra føde- og drikkevarer og foderstoffer.
Forurenet, gennemvædet tøj skal det tages af med det samme.
Vask hænder inden der holdes pause og ved arbejdsophør.
Undgå kontakt med øjne og hud.
- **Åndedrætsværn:** Ikke påkrævet.
- **Håndbeskyttelse:**



Beskyttelseshandsker

Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.

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På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.

Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.

- **Handskemateriale:**

Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden.

- **Handskematerialets gennemtrængningstid**

Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.

- **Øjenbeskyttelse:**



Tætsluttende beskyttelsesbriller

PUNKT 9: Fysiske og kemiske egenskaber

- **9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber**

- **Generelle oplysninger**

- **Udseende:**

Form: Pellets

Farve: Hvid

- **Lugt:** Lugtfri

- **Lugttærskel:** Ikke bestemt.

- **pH-værdi:** Ikke relevant.

- **Tilstandsændring**

Smeltepunkt/frysepunkt: 323 °C

Begyndelseskogepunkt og kogepunktsinterval: 1.388 °C

- **Flammepunkt:** Ikke relevant.

- **Antændelighed (fast stof, luftart):** Stoffet er ikke antændeligt.

- **Dekomponeringstemperatur:** Ikke bestemt.

- **Selvantændelsestemperatur:** Ikke bestemt.

- **Eksplorative egenskaber:** Produktet er ikke eksplosivt.

- **Eksplisionsgrænser:**

Nedre: Ikke bestemt.

Øvre: Ikke bestemt.

- **Damptryk ved 800 °C:** 3,5 hPa

- **Densitet ved 20 °C:** 2,13 g/cm³

- **Relativ massefylde:** Ikke bestemt.

- **Dampmassefylde:** Ikke relevant.

- **Fordampningshastighed** Ikke relevant.

- **Opløselighed i/blandbarhed med vand ved 20 °C:** 420 g/l

- **Fordelingskoefficient: n-oktanol/vand:** Ikke bestemt.

- **Viskositet:**

dynamisk: Ikke relevant.

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kinematisk:	Ikke relevant.
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· 9.2 Andre oplysninger	Der står ingen yderligere, relevante informationer til rådighed.
--------------------------------	--

PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Der står ingen yderligere, relevante informationer til rådighed.
- **10.2 Kemisk stabilitet**
- **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.
- **10.3 Risiko for farlige reaktioner** Der er ikke kendskab til nogen farlige reaktioner.
- **10.4 Forhold, der skal undgås** Der står ingen yderligere, relevante informationer til rådighed.
- **10.5 Materialer, der skal undgås:** Der står ingen yderligere, relevante informationer til rådighed.
- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**

- **Akut toksicitet**
Farlig ved indtagelse.

- **Klassificeringsrelevante LD/LC50-værdier:**

Oral	LD50	2.000 mg/kg (rat)
------	------	-------------------

- **Primær irritationsvirkning:**
- **Hudætsning/-irritation**
Forårsager svære ætsninger af huden og øjenskader.
- **Alvorlig øjenskade/øjenirritation**
Forårsager alvorlig øjenskade.
- **Respiratorisk sensibilisering eller hudsensibilisering**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Yderligere toksikologiske oplysninger:**
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**
- **Kimcellemutagenicitet**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Kræftfremkaldende egenskaber**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Reproduktionstoksicitet**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Enkel STOT-eksponering**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Gentagne STOT-eksponeringer**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Aspirationsfare**
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.
- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.

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- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**
Fareklasse for vand 1 (klassificering ifølge listen): svagt vandforurenende
Må ikke udledes i grundvandet, vandløb eller kloaksystemet ufortyndet eller i større mængder.
Må ikke udledes ufortyndet eller uneutraliseret i spildevandet eller recipienten.
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.
- **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

PUNKT 13: Bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** *Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.*
- **Urensede emballager:**
- **Anbefaling:** *Bortskaffes i overensstemmelse med myndighedernes forskrifter.*
- **Anbefalet rengøringsmiddel:** *Vand, eventuelt tilsat rengøringsmidler.*

PUNKT 14: Transportoplysninger

- | | |
|--|---|
| · 14.1 UN-nummer | |
| · ADR, IMDG, IATA | UN1823 |
| · 14.2 UN-forsendelsesbetegnelse (UN proper shipping name) | |
| · ADR | 1823 NATRIUMHYDROXID, FAST |
| · IMDG, IATA | SODIUM HYDROXIDE, SOLID |
| · 14.3 Transportfareklasse(r) | |
| · ADR, IMDG, IATA | |
| |  |
| · klasse | 8 Ætsende stoffer |
| · Faremærkat | 8 |
| · 14.4 Emballagegruppe | |
| · ADR, IMDG, IATA | II |
| · 14.5 Miljøfarer: | Ikke relevant. |
| · 14.6 Særlige forsigtighedsregler for brugeren | Advarsel: Ætsende stoffer |
| · Farenummer (Kemler-tal): | 80 |
| · EMS-nummer: | 8-06 |
| · Segregation groups | Alkalis |
| · Stowage Category | A |
| · Segregation Code | SG35 Stow "separated from" SGG1-acids |
| · 14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden | Ikke relevant. |

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· **Transport/yderligere oplysninger:**

· **ADR**

· **Begrænsede mængder (LQ)**

1 kg

· **Undtagne mængder (EQ)**

Kode: E2

Største tilladte nettomængde pr. indvendig emballage: 30 g

Største tilladte nettomængde pr. ydre emballage: 500 g

· **Transportkategori**

2

· **Tunnelrestriktionskode**

E

· **IMDG**

· **Limited quantities (LQ)**

1 kg

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":**

UN 1823 NATRIUMHYDROXID, FAST, 8, II

PUNKT 15: Oplysninger om regulering

· **15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø**

· **Direktiv 2012/18/EU**

· **Navngivne farlige stoffer - BILAG I** Stoffet er ikke optaget i listen.

· **Direktiv 2011/65/EU om begrænsning af anvendelsen af visse farlige stoffer i elektrisk og elektronisk udstyr - Bilag II**

Stoffet er ikke optaget i listen.

· **FORORDNING (EU) 2019/1148**

· **Bilag I - UDgangsSTOFFER TIL EKSPLOSIVSTOFFER UNDERLAGT BEGRÆNSNINGER (Øvre grænseværdi med henblik på licens i henhold til artikel 5, stk. 3)**

Stoffet er ikke optaget i listen.

· **Bilag II - INDBERETNINGSPLOTTIGE UDgangsSTOFFER TIL EKSPLOSIVSTOFFER**

Stoffet er ikke optaget i listen.

· **Forordning (EF) nr. 273/2004 om narkotikaprækursorer** Stoffet er ikke optaget i listen.

· **Forordning (EF) Nr. 111/2005 om regler for overvågning af handel med narkotikaprækursorer mellem Fællesskabet og tredjelande**

Stoffet er ikke optaget i listen.

· **Nationale forskrifter:**

· **MAL-Code:** 00-4

· **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produktgenskaber og stifter heller ikke noget kontraktligt retsforhold.

· **Forkortelser og akronymer:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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*CAS: Chemical Abstracts Service (division of the American Chemical Society)**Måleteknisk Arbejdshygiejnisk Luftbehov**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Met. Corr.1: Metalætsende – Kategori 1**Acute Tox. 4: Akut toksicitet – Kategori 4**Skin Corr. 1A: Hudætsning/hudirritation – Kategori 1A**Eye Dam. 1: Alvorlige øjenskader/øjenirritation – Kategori 1*

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RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** natriumhydroxide
- **Artikelnummer:** 21160, 21160-sp, 21162
- **CAS-nummer:**
1310-73-2
- **EC-nummer:**
215-185-5
- **Catalogusnummer:**
011-002-00-6
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstrekker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Aurion**
Binnenhaven 5
6709 PD Wageningen
The Netherlands
Tel: 31 317 415094
Fax: 31 317 415955
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS05 corrosie

Met. Corr.1 H290 Kan bijtend zijn voor metalen.

Skin Corr. 1A H314 Veroorzaakt ernstige brandwonden en oogletsel.

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.



GHS07

Acute Tox. 4 H302 Schadelijk bij inslikken.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**
De stof/product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

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· Gevarenpictogrammen



GHS05 GHS07

· Signaalwoord Gevaar

· Gevarenaanduidingen

H290 Kan bijtend zijn voor metalen.

H302 Schadelijk bij inslikken.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

· Veiligheidsaanbevelingen

P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken.
Huid met water afspoelen [of afdouchen].

P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.

P310 Onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.

P321 Specifieke behandeling vereist (zie op dit etiket).

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

· 2.3 Andere gevaren

· Resultaten van PBT- en zPzB-beoordeling

· **PBT:** Niet bruikbaar.

· **zPzB:** Niet bruikbaar.

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

· 3.1 Chemische karakterisering: Stoffen

· CAS-Nr. omschrijving

1310-73-2 natriumhydroxide

· Identificatienummer(s)

· **EC-nummer:** 215-185-5

· **Catalogusnummer:** 011-002-00-6

RUBRIEK 4: Eerstehulpmaatregelen

· 4.1 Beschrijving van de eerstehulpmaatregelen

· **Algemene informatie:** Verontreinigde kleding onmiddellijk uittrekken.

· **Na het inademen:** Bij bewusteloosheid ligging en vervoer in stabiele zijligging.

· **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.

· **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.

· **Na inslikken:** Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.

· **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.

· **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**

Geen verdere relevante informatie verkrijgbaar.

NL
(Vervolg op blz. 3)

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RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Geen bijzondere maatregelen nodig.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures**
Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvorzorgsmaatregelen:** Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**
Neutralisatiemiddel gebruiken.
Besmet materiaal zoals afval volgens punt 13 verwijderen.
Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**
Informatie inzake veilig gebruik - zie hoofdstuk 7.
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.
Informatie inzake berging - zie hoofdstuk 13.

RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel** Goed stofvrij maken.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Geen bijzondere maatregelen noodzakelijk.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet noodzakelijk.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **8.1 Controleparameters**
- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:** Vervalt.
- **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.
- **8.2 Maatregelen ter beheersing van blootstelling**
- **Persoonlijke beschermingsvoorzieningen:**
- **Algemene beschermings- en gezondheidsmaatregelen:**
Verwijderd houden van eet- en drinkwaren.
Verontreinigde kleding onmiddellijk uittrekken.
Vóór de pauze en aan het einde van werktijd handen wassen.
Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:** Niet noodzakelijk.

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· Handbescherming:

Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.
Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

· Handschoenmateriaal

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant.

· Doordringingstijd van het handschoenmateriaal

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

· Oogbescherming:

Nauw aansluitende veiligheidsbril

RUBRIEK 9: Fysische en chemische eigenschappen

· 9.1 Informatie over fysische en chemische basiseigenschappen**· Algemene gegevens****· Voorkomen:**

Vorm:	Pellets
Kleur:	Wit
Geur:	Reukloos
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde: Niet bruikbaar.

· Toestandsverandering

Smelt-/vriespunt:	323 °C
Beginkookpunt en kooktraject:	1.388 °C

· Vlampunt: Niet bruikbaar.

· Ontvlambaarheid (vast, gas): De stof is niet ontvlambaar.

· Ontledingstemperatuur: Niet bepaald.

· Zelfontbrandingstemperatuur: Niet bepaald.

· Ontploffingseigenschappen: Het produkt is niet ontploffingsgevaarlijk.

· Ontploffingsgrenzen:

Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.

· Dampspanning bij 800 °C: 3,5 hPa

· Dichtheid bij 20 °C:	2,13 g/cm ³
· Relatieve dichtheid	Niet bepaald.
· Dampdichtheid	Niet bruikbaar.
· Verdampingssnelheid	Niet bruikbaar.

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- | | |
|---|---|
| · Oplosbaarheid in/mengbaarheid met Water bij 20 °C: | 420 g/l |
| · Verdelingscoëfficiënt: n-octanol/water: | Niet bepaald. |
| · Viscositeit | |
| Dynamisch: | Niet bruikbaar. |
| Kinematisch: | Niet bruikbaar. |
| · 9.2 Overige informatie | Geen verdere relevante informatie verkrijgbaar. |

RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Geen gevaarlijke reacties bekend.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit**
Schadelijk bij inslikken.

· Indelingsrelevantie LD/LC50-waarden:

Oraal	LD50	2.000 mg/kg (rat)
-------	------	-------------------

- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**
Veroorzaakt ernstige brandwonden en oogletsel.
- **Ernstig oogletsel/oogirritatie**
Veroorzaakt ernstig oogletsel.
- **Sensibilisatie van de luchtwegen/de huid**
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Aanvullende toxicologische informatie:**
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.

(Vervolg op blz. 6)

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- **Verdere ecologische informatie:**
- **Algemene informatie:**
Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen
Gevaar voor water klasse 1 (D) (Lijstclassificatie): gevaar voor water klein
Niet onverdund of in grote hoeveelheden lozen in grondwater, in oppervlaktewater of in de riolering.
Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terechtkomen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.
- **Aanbevolen reinigingsmiddel:** Water, eventueel met toevoeging van reinigingsmiddelen.

RUBRIEK 14: Informatie met betrekking tot het vervoer

- | | |
|---|---|
| · 14.1 VN-nummer | |
| · ADR, IMDG, IATA | UNI823 |
| · 14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN | |
| · ADR | 1823 NATRIUMHYDROXIDE, VAST |
| · IMDG, IATA | SODIUM HYDROXIDE, SOLID |
| · 14.3 Transportgevaarenklasse(n) | |
| · ADR, IMDG, IATA | |
| |  |
| · klasse | 8 Bijtende stoffen |
| · Etiket | 8 |
| · 14.4 Verpakkingsgroep: | |
| · ADR, IMDG, IATA | II |
| · 14.5 Milieugevaren: | Niet bruikbaar. |
| · 14.6 Bijzondere voorzorgen voor de gebruiker | Waarschuwing: Bijtende stoffen |
| · Gevaarsidentificatienummer (Kemler-getal): | 80 |
| · EMS-nummer: | 8-06 |
| · Segregation groups | Alkalis |
| · Stowage Category | A |
| · Segregation Code | SG35 Stow "separated from" SGG1-acids |
| · 14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code | Niet bruikbaar. |

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· **Transport/verdere gegevens:**

· **ADR**

· **Beperkte hoeveelheden (LQ)**

1 kg

· **Uitgezonderde hoeveelheden (EQ)**

Code: E2

Grootste netto hoeveelheid per binnenverpakking: 30 g

Grootste netto hoeveelheid per buitenverpakking: 500 g

· **Vervoerscategorie**

2

· **Tunnelbeperkingscode**

E

· **IMDG**

· **Limited quantities (LQ)**

1 kg

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· **VN "Model Regulation":**

UN 1823 NATRIUMHYDROXIDE, VAST, 8, II

RUBRIEK 15: Regelgeving

· **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**

· **SZW-lijst van kankerverwekkende stoffen** De stof is niet aanwezig.

· **SZW-lijst van mutagene stoffen** De stof is niet aanwezig.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid** De stof is niet aanwezig.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling** De stof is niet aanwezig.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding** De stof is niet aanwezig.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)** De stof is niet aanwezig.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen** De stof is niet aanwezig.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** De stof is niet aanwezig.

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

De stof is niet aanwezig.

· **VERORDENING (EU) 2019/1148**

· **Bijlage I - PRECURSOREN VOOR EXPLOSIEVEN WAARVOOR EEN BEPERKING GELDT (Bovengrenswaarde ten behoeve van vergunningverlening op grond van artikel 5, lid 3)**

De stof is niet aanwezig.

· **Bijlage II - PRECURSOREN VOOR EXPLOSIEVEN DIE MOETEN WORDEN GEMELD**

De stof is niet aanwezig.

· **Verordening (EG) nr. 273/2004 inzake drugsprecursoren** De stof is niet aanwezig.

· **Verordening (EG) Nr. 111/2005 houdende voorschriften voor het toezicht op de handel tussen de Gemeenschap en derde landen in drugsprecursoren**

De stof is niet aanwezig.

· **Nationale voorschriften:**

· **Gevaarklasse v. water: Waterbezwaarlijkheid (NL): B(4) Weinig schadelijk voor in water levende organismen**

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van producteigenschappen en vestigen geen contractuele rechtsbetrekking.

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Afkortingen en acroniemen:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Bijtend voor metalen – Categorie 1

Acute Tox. 4: Acute toxiciteit – Categorie 4

Skin Corr. 1A: Huidcorrosie/-irritatie – Categorie 1A

Eye Dam. 1: Ernstig oogletsel/oogirritatie – Categorie 1

NL

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KOHTA 1: Aineen tai seoksen ja yhtiön tai yrityksen tunnistetiedot

- **1.1 Tuotetunniste**
- **Kauppanimike:** Natriumhydroksidi
- **Artikkelinumero:** 21160, 21160-sp, 21162
- **CAS-numero:**
1310-73-2
- **EY-numero:**
215-185-5
- **Indeksinumero:**
011-002-00-6
- **1.2 Aineen tai seoksen merkitykselliset tunnistetut käytöt ja käytöt, joita ei suositella**
Merkittäviä lisätietoja ei ole saatavilla.
- **Aineen / valmisteiden käyttö** Laboratoriokemikaalit
- **1.3 Käyttöturvallisuustiedotteen toimittajan tiedot**
- **Valmistaja/toimittaja:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Tietoja antaa:** Product safety department
- **1.4 Häätöpuhelinnumero:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

KOHTA 2: Vaaran yksilöinti

- **2.1 Aineen tai seoksen luokitus**
- **Luokitus asetuksen (EY) N:o 1272/2008 mukaisesti**



GHS05 syöpyminen

Met. Corr.1 H290 Voi syövyttää metalleja.

Skin Corr. 1A H314 Voimakkaasti ihoa syövyttävää ja silmiä vaurioittavaa.

Eye Dam. 1 H318 Vaurioittaa vakavasti silmiä.



GHS07

Acute Tox. 4 H302 Haitallista nieltynä.

- **2.2 Merkinnät**
- **Merkinnät asetuksen (EY) N:o 1272/2008 mukaisesti** Aine on luokiteltu ja merkitty CLP-asetuksen mukaan.
- **Varoitusmerkit**



GHS05



GHS07

- **Huomiosana** Vaara

(jatkuu sivulla 2)

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(jatkuu sivulla 1)

- **Vaaralausekkeet**
 - H290 Voi syövyttää metalleja.
 - H302 Haitallista nieltynä.
 - H314 Voimakkaasti ihoa syövyttävää ja silmiä vaurioittavaa.
- **Turvalausekkeet**
 - P303+P361+P353 JOS KEMIKAALIA JOUTUU IHOLLE (tai hiuksiin): Riisu saastunut vaatetus välittömästi. Huuhdo iho vedellä [tai suihkuta].
 - P305+P351+P338 JOS KEMIKAALIA JOUTUU SILMIIN: Huuhdo huolellisesti vedellä usean minuutin ajan. Poista mahdolliset piilolinssit, jos sen voi tehdä helposti. Jatka huuhtomista.
 - P310 Ota välittömästi yhteys MYRKYTYSTIETOKESKUKSEEN/lääkäriin.
 - P321 Erityishoitoa tarvitaan (katso pakkauksen merkinnöissä).
 - P405 Varastoi lukitussa tilassa.
 - P501 Hävitä säiliö(t) noudattaen paikallisia/alueellisia/kansallisia/kansainvälisiä määräyksiä.
- **2.3 Muut vaarat**
- **PBT- ja vPvB-arvioinnin tulokset**
- **PBT:** Ei voida käyttää.
- **vPvB:** Ei voida käyttää.

KOHTA 3: Koostumus ja tiedot aineosista

- **3.1 Kemialliset ominaisuudet: Aineet**
- **CAS-nro. nimike**
1310-73-2 Natriumhydroksidi
- **Tunnistusnumero(t)**
- **EY-numero:** 215-185-5
- **Indeksinumero:** 011-002-00-6

KOHTA 4: Ensiaputoimenpiteet

- **4.1 Ensiaputoimenpiteiden kuvaus**
- **Yleisohjeet:** Aineen saastuttamat vaatekappaleet on riisuttava välittömästi.
- **Hengitettynä:** Tajuton pidettävä ja kuljetettava kyljellään.
- **Ihokosketuksessa:** Pestävä heti vedellä ja saippualla ja huuhdottava hyvin.
- **Aineen päästyä silmiin:**
Silmiä huuhdotaan luomet auki juoksevan veden alla useita minuutteja ja käännetään lääkärin puoleen.
- **Nielyä:**
Juotava runsaasti vettä ja huolehdittava raittiin ilman saannista. Käännyttävä välittömästi lääkärin puoleen.
- **4.2 Tärkeimmät oireet ja vaikutukset, sekä välittömät että viivästyneet** Merkittäviä lisätietoja ei ole saatavilla.
- **4.3 Mahdollisesti tarvittavaa välitöntä lääketieteellistä apua ja erityishoitoa koskevat ohjeet**
Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 5: Palontorjuntatoimenpiteet

- **5.1 Sammutusaineet**
- **Sopivat sammutusaineet:** Palontorjuntatoimenpiteet ympäristöä vastaavasti.
- **5.2 Aineesta tai seoksesta johtuvat erityiset vaarat** Merkittäviä lisätietoja ei ole saatavilla.
- **5.3 Palontorjuntaa koskevat ohjeet**
- **Erityinen suojavarustus:** Erikoistoimenpiteitä ei tarvita.

FI

(jatkuu sivulla 3)

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(jatkuu sivulla 2)

KOHTA 6: Toimenpiteet onnettomuuspäästöissä

- **6.1 Varotoimenpiteet, henkilönsuojaimet ja menettely hätätilanteessa**
Käytettävä suojavarustusta. Suojautumattomat henkilöt pidettävä loitolla.
- **6.2 Ympäristöön kohdistuvat varotoimet:** Estettävä pääsy viemäreihin/pintavesiin/pohjaveteen.
- **6.3 Suojarakenteita ja puhdistusta koskevat menetelmät ja -välineet:**
Käytettävä neutralointiaineita.
Saastunut aine on jätteenä hävitettävä kohdan 13 mukaisesti.
Huolehdittava riittävästä tuuleutuksesta.
- **6.4 Viittaukset muihin kohtiin**
Turvallista käsittelyä koskevia ohjeita kappaleessa 7.
Henkilökohtaista suojavarustusta koskevia ohjeita kappaleessa 8.
Aineen hävitystä koskevia ohjeita kappaleessa 13.

KOHTA 7: Käsittely ja varastointi

- **7.1 Turvallisen käsittelyn edellyttämät toimenpiteet** Hyvä pölynpoisto.
- **Palo- ja räjähdysuojaohjeet:** Erikoistoimenpiteitä ei tarvita.
- **7.2 Turvallisen varastoinnin edellyttämät olosuhteet, mukaan luettuina yhteensopimattomuudet**
- **Varastointi:**
- **Varastotiloille ja säiliöille asetettavat vaatimukset:** Ei erikoisvaatimuksia.
- **Yhteisvarastointiohjeet:** Ei tarvita.
- **Lisätietoja varastointiehtoihin:** Astiat on pidettävä tiiviisti suljettuina.
- **7.3 Erityinen loppukäyttö** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 8: Altistumisen ehkäiseminen ja henkilönsuojaimet

- **8.1 Valvontaa koskevat muuttajat**
- **Lisäohjeita teknisten laitteiden varustukseen:** Ei muita tietoja, ks. kohta 7.

· **Aineosat työpaikkakohtaisin valvottavin raja-arvoin:**

1310-73-2 Natriumhydroksidi

HTP Kattoarvo: 2 mg/m³

· **Lisäohjeet:** Tiedot perustuvat valmistushetkellä voimassaoleviin luetteluihin.

· **8.2 Altistumisen ehkäiseminen**

· **Henkilökohtainen suojavarustus:**

· **Yleiset suoja- ja hygieniatoimenpiteet:**

Pidettävä loitolla elintarvikkeista, juomista ja rehuista.

Likaantuneet, aineen saastuttamat vaatekappaleet on riisuttava välittömästi.

Kädet on pestävä ennen taukoja ja työn päätyttyä.

Vältettävä ihokosketusta ja kosketusta silmiin.

· **Hengityssuoja:** Ei tarpeen.

· **Käsisuojus:**



Suojakäsineet

Käsinemateriaalin tulee olla tuotetta/ainetta/valmistetta kestävä ja läpäisemätöntä.

Puuttuvien testien vuoksi suositusta soveltuvasta suojakäsinemateriaalista tuotteelle/ valmisteelle / kemikaalikohteelle ei voida antaa.

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(jatkuu sivulla 3)

Suojakäsinemateriaalin valinnassa on otettava huomioon läpäisyajat, läpäisevyyskerroin ja kuluminen.

· **Käsinemateriaali**

Soveltuvan käsinetyypin valikoima ei riipu yksinomaan materiaalista vaan myös muista laatuominaisuuksista ja vaihtelee eri valmistajilla.

· **Käsinemateriaalin läpäisy aika**

Tarkka läpäisy aika on selvitettävä suojakäsinemateriaalin valmistajalta ja sitä on noudatettava.

· **Silmäsuojus:**



Tiiviit suojalasit

KOHTA 9: Fysikaaliset ja kemialliset ominaisuudet

· **9.1 Fysikaalisia ja kemiallisia perusominaisuuksia koskevat tiedot**

· **Yleiset ohjeet**

· **Olomuoto:**

Muoto: Rakeet

Väri: Valkoinen

· **Haju:** Hajuton

· **Hajukynnys:** Ei määritetty.

· **pH-arvo:** Ei voida käyttää.

· **Tilanmuutos**

Sulamis- tai jäätymispiste: 323 °C

Kiehumispiste ja kiehumisalue: 1.388 °C

· **Leimahduspiste:** Ei voida käyttää.

· **Syttyvyys (kiinteät aineet, kaasut):** Aine ei ole syttyvä.

· **Hajoamislämpötila:** Ei määritetty.

· **Itsesyttymislämpötila:** Ei määritetty.

· **Räjähdyvyys:** Tuote ei ole räjähdysvaarallinen.

· **Räjähdyksrajat:**

Alempi: Ei määritetty.

Ylempi: Ei määritetty.

· **Höyrypaine 800 °C lämpötilassa:** 3,5 hPa

· **Tiheys 20 °C lämpötilassa:** 2,13 g/cm³

· **Suhteellinen tiheys:** Ei määritetty.

· **Höyryntiheys:** Ei voida käyttää.

· **Haihtumisnopeus:** Ei voida käyttää.

· **Liukenevuus/sekoittuvuus**

veteen 20 °C lämpötilassa: 420 g/l

· **Jakautumiskerroin: n-oktanoliv/vesi:** Ei määritetty.

· **Viskositeetti:**

Dynaaminen: Ei voida käyttää.

Kinemaattinen: Ei voida käyttää.

(jatkuu sivulla 5)

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· 9.2 Muut tiedot

Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 10: Stabiilisuus ja reaktiivisuus

- 10.1 Reaktiivisuus Merkittäviä lisätietoja ei ole saatavilla.
- 10.2 Kemiallinen stabiilisuus
- Terminen hajoavuus / vältettävät olosuhteet: Ei hajaantumista määräystenmukaisessa käytössä.
- 10.3 Vaarallisten reaktioiden mahdollisuus Ei tiedossa vaarallisia reaktioita.
- 10.4 Vältettävät olosuhteet Merkittäviä lisätietoja ei ole saatavilla.
- 10.5 Yhteensopimattomat materiaalit: Merkittäviä lisätietoja ei ole saatavilla.
- 10.6 Vaaralliset hajoamistuotteet: Tiedossa ei ole vaarallisia hajoamistuotteita.

KOHTA 11: Myrkyllisyyteen liittyvät tiedot

- 11.1 Tiedot myrkyllisistä vaikutuksista
- Välitön myrkyllisyys
Haitallista nieltynä.

· Luokittelurelevantti LD/LC50-arvot:

Oraali	LD50	2.000 mg/kg (rat)
--------	------	-------------------

- Ensisijainen ärsyttävä vaikutus:
- Ihosyövyttävyyksi/ihoärsytys
Voimakkaasti ihoa syövyttävää ja silmiä vaurioittavaa.
- Vakava silmävaurio/silmä-ärsytys
Vaurioittaa vakavasti silmiä.
- Hengitysteiden tai ihon herkistyminen Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Toksikologisia lisätietoja:
- CMR-vaikutukset eli syöpää aiheuttavat, perimää vaurioittavat ja lisääntymiselle vaaralliset vaikutukset
- Sukusolujen perimää vaurioittavat vaikutukset Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Syöpää aiheuttavat vaikutukset Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Lisääntymiselle vaaralliset vaikutukset Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Elinkohtainen myrkyllisyys – kerta-altistuminen
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Elinkohtainen myrkyllisyys – toistuva altistuminen
Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.
- Aspiraatiovaara Saatavilla olevien tietojen perusteella luokituskriteerit eivät täyty.

KOHTA 12: Tiedot vaarallisuudesta ympäristölle

- 12.1 Myrkyllisyys
- Vesimyrkyllisyys: Merkittäviä lisätietoja ei ole saatavilla.
- 12.2 Pysyvyys ja hajoavuus Merkittäviä lisätietoja ei ole saatavilla.
- 12.3 Biokertyvyys Merkittäviä lisätietoja ei ole saatavilla.
- 12.4 Liikkuvuus maaperässä Merkittäviä lisätietoja ei ole saatavilla.
- Ekologisia lisätietoja:
- Yleisohjeita:
Vesistövaarallisuusluokka 1 (listaluokitus): lievästi vesistöä vaarantava
Estetään aineen pääsy ohentamattomana tai suurina määrinä pohjaveteen, vesistöihin, viemäristöön.
Ei saa päästää ohentamatta tai neutraloimatta viemäriin eikä vedenottoaltaaseen.

(jatkuu sivulla 6)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 16.03.2022

Tarkistus: 16.03.2022

Kauppanimike: Natriumhydroksidi


(jatkuu sivulla 5)

- **12.5 PBT- ja vPvB-arvioinnin tulokset**
- **PBT:** Ei voida käyttää.
- **vPvB:** Ei voida käyttää.
- **12.6 Muut haitalliset vaikutukset** Merkittäviä lisätietoja ei ole saatavilla.

KOHTA 13: Jätteiden käsittelyyn liittyvät näkökohdat

- **13.1 Jätteiden käsittelymenetelmät**
- **Suositus:** Ei voida hävittää yhdessä talousjätteiden kanssa. Ei saa päästää viemäristöön.
- **Puhdistamattomat pakkaukset:**
- **Suositus:** Hävitettävä virallisten määräysten mukaisesti.
- **Suosittelava puhdistusaine:** Vesi, johon tarvittaessa lisätään puhdistusaineita.

KOHTA 14: Kuljetustiedot

- | | |
|--|---|
| · 14.1 YK-numero
· ADR, IMDG, IATA | UNI1823 |
| · 14.2 Kuljetuksessa käytettävä virallinen nimi
· ADR
· IMDG, IATA | 1823 NATRIUMHYDROKSIDI, KIINTEÄ
SODIUM HYDROXIDE, SOLID |
| · 14.3 Kuljetuksen vaaraluokka
· ADR, IMDG, IATA | |
|  | |
| · luokka
· Lipuke | 8 Syövyttävät aineet
8 |
| · 14.4 Pakkausryhmä
· ADR, IMDG, IATA | II |
| · 14.5 Ympäristövaarat: | Ei voida käyttää. |
| · 14.6 Erityiset varotoimet käyttäjälle
· Vaaran tunnus-nro (Kemler-luku):
· EMS-numero:
· Segregation groups
· Stowage Category
· Segregation Code | Varoitus: Syövyttävät aineet
80
8-06
Alkalis
A
SG35 Stow "separated from" SGG1-acids |
| · 14.7 Kuljetus irtolastina Marpol-sopimuksen II liitteen ja IBC-säännösten mukaisesti | Ei voida käyttää. |
| · Kuljetus/lisätietoja: | |
| · ADR
· Rajoitetut määrät (LQ)
· Poikkeusmäärät (EQ)

· Kuljetuskategoria | 1 kg
Koodi: E2
Enimmäisnettomäärä sisäpakkausta kohti: 30 g
Enimmäisnettomäärä ulkopakkausta kohti: 500 g

2 |

(jatkuu sivulla 7)

Käyttöturvallisuustiedote

1907/2006/EY, 31 artikla mukainen

Painatuspäivämäärä 16.03.2022

Tarkistus: 16.03.2022

Kauppanimike: Natriumhydroksidi

(jatkuu sivulla 6)

· Tunnelirajoituskoodi:	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 NATRIUMHYDROKSIDI, KIINTEÄ, 8, II

KOHTA 15: Lainsäädäntöä koskevat tiedot

- **15.1 Nimenomaisesti ainetta tai seosta koskevat turvallisuus-, terveys- ja ympäristösäännökset tai -lainsäädäntö**
- **Direktiivi 2012/18/EU**
- **Nimetyt vaaralliset aineet - LIITE I** Aine ei sisälly
- **Direktiivi 2011/65/EU tiettyjen vaarallisten aineiden käytön rajoittamisesta sähkö- ja elektroniikkalaitteissa - Liite II**
Aine ei sisälly
- **ASETUS (EU) 2019/1148**
- **Liite I - RAJOITETUT RÄJÄHTEIDEN LÄHTÖAINEET (Yläraja-arvo lupien myöntämiseksi 5 artiklan 3 kohdan mukaisesti)**
Aine ei sisälly
- **Liite II - ILMOITETTAVAT RÄJÄHTEIDEN LÄHTÖAINEET** Aine ei sisälly
- **Asetus (EY) N:o 273/2004 huumausaineiden lähtöaineista** Aine ei sisälly
- **Asetus (EY) N:o 111/2005 yhteisön ja kolmansien maiden välisen huumausaineiden lähtöaineiden kaupan valvontaa koskevista säännöistä**
Aine ei sisälly
- **15.2 Kemikaaliturvallisuusarviointi:** Kemikaaliturvallisuusarviointia ei ole tehty.

KOHTA 16: Muut tiedot

Annetut tiedot perustuvat tähänhetkisiin tietoihimme. Ne eivät kuitenkaan anna takuuta tuotteen ominaisuuksista eivätkä aikaansaa sopimuksellista oikeussuhdetta.

- **Lyhenteet ja lyhennykset:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Met. Corr. 1: Metalleja syövyttävät aineet ja seokset – Katgoria 1
Acute Tox. 4: Välitön myrkyllisyys – Katgoria 4
Skin Corr. 1A: Ihosyövyttävyys/ihoärsytys – Katgoria 1A
Eye Dam. 1: Vakava silmävaurio/silmä-ärsytys – Katgoria 1

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RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** hydroxyde de sodium
- **Code du produit:** 21160, 21160-sp, 21162
- **No CAS:**
1310-73-2
- **Numéro CE:**
215-185-5
- **Numéro index:**
011-002-00-6
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS05 corrosion

Met. Corr.1 H290 Peut être corrosif pour les métaux.

Skin Corr. 1A H314 Provoque de graves brûlures de la peau et de graves lésions des yeux.

Eye Dam. 1 H318 Provoque de graves lésions des yeux.



GHS07

Acute Tox. 4 H302 Nocif en cas d'ingestion.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** La substance est classifiée et étiquetée selon le règlement CLP.
- **Pictogrammes de danger**



GHS05

GHS07

- **Mention d'avertissement** Danger

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(suite de la page 1)

- **Mentions de danger**

- H290 Peut être corrosif pour les métaux.
- H302 Nocif en cas d'ingestion.
- H314 Provoque de graves brûlures de la peau et de graves lésions des yeux.

- **Conseils de prudence**

- P303+P361+P353 EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux): Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau [ou se doucher].
- P305+P351+P338 EN CAS DE CONTACT AVEC LES YEUX: Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
- P310 Appeler immédiatement un CENTRE ANTIPOISON/un médecin.
- P321 Traitement spécifique (voir sur cette étiquette).
- P405 Garder sous clef.
- P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

- **2.3 Autres dangers**

- **Résultats des évaluations PBT et vPvB**

- **PBT:** Non applicable.
- **vPvB:** Non applicable.

RUBRIQUE 3: Composition/informations sur les composants

- **3.1 Caractérisation chimique: Substances**

- **No CAS Désignation**
1310-73-2 hydroxyde de sodium
- **Code(s) d'identification**
- **Numéro CE:** 215-185-5
- **Numéro index:** 011-002-00-6

RUBRIQUE 4: Premiers secours

- **4.1 Description des premiers secours**

- **Remarques générales:** Enlever immédiatement les vêtements contaminés par le produit.
- **Après inhalation:** En cas d'inconscience, coucher et transporter la personne en position latérale stable.
- **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.
- **Après contact avec les yeux:**
Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.
- **Après ingestion:** Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.
- **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.
- **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**
Pas d'autres informations importantes disponibles.

RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**

- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**
Pas d'autres informations importantes disponibles.

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- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Aucune mesure particulière n'est requise.

RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**
Porter un équipement de sécurité. Eloigner les personnes non protégées.
- **6.2 Précautions pour la protection de l'environnement:**
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**
Utiliser un neutralisant.
Évacuer les matériaux contaminés en tant que déchets conformément au point 13.
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger** Bien dépoussiérer.
- **Préventions des incendies et des explosions:** Aucune mesure particulière n'est requise.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Pas nécessaire.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

- **8.1 Paramètres de contrôle**
- **Indications complémentaires pour l'agencement des installations techniques:**
Sans autre indication, voir point 7.

- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

1310-73-2 hydroxyde de sodium

VLEP Valeur à long terme: 2 mg/m ³

- **Remarques supplémentaires:**
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.
- **8.2 Contrôles de l'exposition**
- **Équipement de protection individuel:**
- **Mesures générales de protection et d'hygiène:**
Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.
Retirer immédiatement les vêtements souillés ou humectés.
Se laver les mains avant les pauses et en fin de travail.
Éviter tout contact avec les yeux et avec la peau.
- **Protection respiratoire:** N'est pas nécessaire.

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· **Protection des mains:**



Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.
À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

· **Matériau des gants**

Le choix de gants appropriés ne dépend pas seulement du matériau, mais également d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre.

· **Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

· **Protection des yeux:**



Lunettes de protection hermétiques

RUBRIQUE 9: Propriétés physiques et chimiques

· **9.1 Informations sur les propriétés physiques et chimiques essentielles**

· **Indications générales**

· **Aspect:**

Forme: Pastilles

Couleur: Blanc

· **Odeur:** Inodore

· **Seuil olfactif:** Non déterminé.

· **valeur du pH:** Non applicable.

· **Changement d'état**

Point de fusion/point de congélation: 323 °C

Point initial d'ébullition et intervalle d'ébullition: 1.388 °C

· **Point d'éclair** Non applicable.

· **Inflammabilité (solide, gaz):** La substance n'est pas inflammable.

· **Température de décomposition:** Non déterminé.

· **Température d'auto-inflammabilité:** Non déterminé.

· **Propriétés explosives:** Le produit n'est pas explosif.

· **Limites d'explosion:**

Inférieure: Non déterminé.

Supérieure: Non déterminé.

· **Pression de vapeur à 800 °C:** 3,5 hPa

· **Densité à 20 °C:** 2,13 g/cm³

· **Densité relative** Non déterminé.

· **Densité de vapeur:** Non applicable.

· **Taux d'évaporation:** Non applicable.

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(suite de la page 4)

· Solubilité dans/miscibilité avec l'eau à 20 °C:	420 g/l
· Coefficient de partage: n-octanol/eau:	Non déterminé.
· Viscosité:	
Dynamique:	Non applicable.
Cinématique:	Non applicable.
· 9.2 Autres informations	Pas d'autres informations importantes disponibles.

RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Aucune réaction dangereuse connue.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë**
Nocif en cas d'ingestion.

- **Valeurs LD/LC50 déterminantes pour la classification:**

Oral	LD50	2.000 mg/kg (rat)
------	------	-------------------

- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**
Provoque de graves brûlures de la peau et de graves lésions des yeux.
- **Lésions oculaires graves/irritation oculaire**
Provoque de graves lésions des yeux.
- **Sensibilisation respiratoire ou cutanée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Indications toxicologiques complémentaires:**
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagenicité sur les cellules germinales**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité pour la reproduction**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

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RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**
 Catégorie de pollution des eaux 1 (D) (classification selon liste): peu polluant
 Ne pas laisser le produit, non dilué ou en grande quantité, pénétrer la nappe phréatique, les eaux ou les canalisations.
 Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.
- **Produit de nettoyage recommandé:** Eau, éventuellement avec des produits de nettoyage

RUBRIQUE 14: Informations relatives au transport

- | | |
|--|--|
| <ul style="list-style-type: none"> · 14.1 Numéro ONU · ADR, IMDG, IATA | UN1823 |
| <ul style="list-style-type: none"> · 14.2 Désignation officielle de transport de l'ONU · ADR · IMDG, IATA | 1823 HYDROXYDE DE SODIUM SOLIDE
SODIUM HYDROXIDE, SOLID |
| <ul style="list-style-type: none"> · 14.3 Classe(s) de danger pour le transport · ADR, IMDG, IATA | 8 Matières corrosives.
8 |
| <ul style="list-style-type: none"> · 14.4 Groupe d'emballage · ADR, IMDG, IATA | II |
| <ul style="list-style-type: none"> · 14.5 Dangers pour l'environnement: | Non applicable. |
| <ul style="list-style-type: none"> · 14.6 Précautions particulières à prendre par l'utilisateur · Numéro d'identification du danger (Indice Kemler): | Attention: Matières corrosives.
80 |



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· No EMS:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC	Non applicable.
· Indications complémentaires de transport:	
· ADR	
· Quantités limitées (LQ)	1 kg
· Quantités exceptées (EQ)	Code: E2 Quantité maximale nette par emballage intérieur: 30 g Quantité maximale nette par emballage extérieur: 500 g
· Catégorie de transport	2
· Code de restriction en tunnels	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· "Règlement type" de l'ONU:	UN 1823 HYDROXYDE DE SODIUM SOLIDE, 8, II

RUBRIQUE 15: Informations relatives à la réglementation

- **15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement**
- **Directive 2012/18/UE**
- **Substances dangereuses désignées - ANNEXE I** la substance n'est pas comprise
- **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**
la substance n'est pas comprise
- **RÈGLEMENT (UE) 2019/1148**
- **Annexe I - PRÉCURSEURS D'EXPLOSIFS FAISANT L'OBJET DE RESTRICTIONS (Valeur limite maximale aux fins de l'octroi d'une licence en vertu de l'article 5, paragraphe 3)**
la substance n'est pas comprise
- **Annexe II - PRÉCURSEURS D'EXPLOSIFS DEVANT FAIRE L'OBJET D'UN SIGNALLEMENT**
la substance n'est pas comprise
- **Règlement (CE) n° 273/2004 relatif aux précurseurs de drogues** la substance n'est pas comprise
- **Règlement (CE) n° 111/2005 fixant des règles pour la surveillance du commerce des précurseurs des drogues entre la Communauté et les pays tiers**
la substance n'est pas comprise
- **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

· **Acronymes et abréviations:**

ADR: Accord relatif au transport international des marchandises dangereuses par route
IMDG: International Maritime Code for Dangerous Goods

(suite page 8)

Fiche de données de sécurité
selon 1907/2006/CE, Article 31

Date d'impression : 16.03.2022

Révision: 16.03.2022

Nom du produit: hydroxyde de sodium

(suite de la page 7)

*IATA: International Air Transport Association**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Met. Corr.1: Substances ou mélanges corrosifs pour les métaux – Catégorie 1**Acute Tox. 4: Toxicité aiguë – Catégorie 4**Skin Corr. 1A: Corrosion cutanée/irritation cutanée – Catégorie 1A**Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1*

FR

Sicherheitsdatenblatt

gemäß 1907/2006/EG, Artikel 31

Druckdatum: 16.03.2022

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ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

· **1.1 Produktidentifikator**

- **Handelsname:** Natriumhydroxid
- **Artikelnummer:** 21160, 21160-sp, 21162
- **CAS-Nummer:**
1310-73-2
- **EG-Nummer:**
215-185-5
- **Indexnummer:**
011-002-00-6

· **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**

Keine weiteren relevanten Informationen verfügbar.

- **Verwendung des Stoffes / des Gemisches** Laborchemikalien

· **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**

· **Hersteller/Lieferant:**

Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com

Science Services GmbH
Unterhachinger Str. 75
81737 München Germany

Tel: +49(0)89 18 93 668-0
safety@scienceservices.de

Deutschland: +49 (0)89 19240, 24h Giftnotruf München, www.toxinfo.org

Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h

- **Auskunftgebender Bereich:** Product safety department

· **1.4 Notrufnummer:**

ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

ABSCHNITT 2: Mögliche Gefahren

· **2.1 Einstufung des Stoffs oder Gemischs**

- **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS05 Ätzwirkung

Met. Corr.1 H290 Kann gegenüber Metallen korrosiv sein.

Skin Corr. 1A H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

Eye Dam. 1 H318 Verursacht schwere Augenschäden.



GHS07

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Acute Tox. 4 H302 Gesundheitsschädlich bei Verschlucken.

- **2.2 Kennzeichnungselemente**
- **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**
Der Stoff ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.
- **Gefahrenpiktogramme**



GHS05 GHS07

- **Signalwort Gefahr**
- **Gefahrenhinweise**
H290 Kann gegenüber Metallen korrosiv sein.
H302 Gesundheitsschädlich bei Verschlucken.
H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
- **Sicherheitshinweise**
P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen [oder duschen].
P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.
P310 Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.
P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).
P405 Unter Verschluss aufbewahren.
P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.
- **2.3 Sonstige Gefahren**
- **Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.

ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

- **3.1 Chemische Charakterisierung: Stoffe**
- **CAS-Nr. Bezeichnung**
1310-73-2 Natriumhydroxid
- **Identifikationsnummer(n)**
- **EG-Nummer:** 215-185-5
- **Indexnummer:** 011-002-00-6

ABSCHNITT 4: Erste-Hilfe-Maßnahmen

- **4.1 Beschreibung der Erste-Hilfe-Maßnahmen**
- **Allgemeine Hinweise:** *Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.*
- **Nach Einatmen:** *Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.*
- **Nach Hautkontakt:** *Sofort mit Wasser und Seife abwaschen und gut nachspülen.*
- **Nach Augenkontakt:**
Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.
- **Nach Verschlucken:** *Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.*
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**
Keine weiteren relevanten Informationen verfügbar.

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- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**
Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Keine besonderen Maßnahmen erforderlich.

ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**
Schutzausrüstung tragen. Ungeschützte Personen fernhalten.
- **6.2 Umweltschutzmaßnahmen:** Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**
Neutralisationsmittel anwenden.
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**
Informationen zur sicheren Handhabung siehe Abschnitt 7.
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.
Informationen zur Entsorgung siehe Abschnitt 13.

ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung** Gute Entstaubung.
- **Hinweise zum Brand- und Explosionsschutz:** Keine besonderen Maßnahmen erforderlich.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht erforderlich.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

- **8.1 Zu überwachende Parameter**
- **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.

- **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:**

1310-73-2 Natriumhydroxid

MAK	vgl. Abschn. IIb
-----	------------------

- **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.

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- **8.2 Begrenzung und Überwachung der Exposition**
- **Persönliche Schutzausrüstung:**
- **Allgemeine Schutz- und Hygienemaßnahmen:**
*Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.
 Beschmutzte, getränkte Kleidung sofort ausziehen.
 Vor den Pausen und bei Arbeitsende Hände waschen.
 Berührung mit den Augen und der Haut vermeiden.*
- **Atemschutz:** Nicht erforderlich.
- **Handschutz:**



Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

- **Handschuhmaterial**
Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich.
- **Durchdringungszeit des Handschuhmaterials**
Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.
- **Augenschutz:**



Dichtschließende Schutzbrille

ABSCHNITT 9: Physikalische und chemische Eigenschaften

- **9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**

- **Allgemeine Angaben**

- **Aussehen:**

Form: Pellets

Farbe: Weiß

· **Geruch:** Geruchlos

· **Geruchsschwelle:** Nicht bestimmt.

· **pH-Wert:** Nicht anwendbar.

- **Zustandsänderung**

Schmelzpunkt/Gefrierpunkt: 323 °C

Siedebeginn und Siedebereich: 1.388 °C

· **Flammpunkt:** Nicht anwendbar.

· **Entzündbarkeit (fest, gasförmig):** Der Stoff ist nicht entzündlich.

· **Zersetzungstemperatur:** Nicht bestimmt.

· **Selbstentzündungstemperatur:** Nicht bestimmt.

· **Explosive Eigenschaften:** Das Produkt ist nicht explosionsgefährlich.

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· Explosionsgrenzen:	
Untere:	Nicht bestimmt.
Obere:	Nicht bestimmt.
· Dampfdruck bei 800 °C:	3,5 hPa
· Dichte bei 20 °C:	2,13 g/cm ³
· Relative Dichte	Nicht bestimmt.
· Dampfdichte	Nicht anwendbar.
· Verdampfungsgeschwindigkeit	Nicht anwendbar.
· Löslichkeit in / Mischbarkeit mit Wasser bei 20 °C:	420 g/l
· Verteilungskoeffizient: n-Octanol/Wasser:	Nicht bestimmt.
· Viskosität:	
Dynamisch:	Nicht anwendbar.
Kinematisch:	Nicht anwendbar.
· 9.2 Sonstige Angaben	Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Keine gefährlichen Reaktionen bekannt.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
 - **Akute Toxizität**
Gesundheitsschädlich bei Verschlucken.
- | | | |
|--|------|-------------------|
| · Einstufungsrelevante LD/LC50-Werte: | | |
| Oral | LD50 | 2.000 mg/kg (rat) |
- **Primäre Reizwirkung:**
 - **Ätz-/Reizwirkung auf die Haut**
Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
 - **Schwere Augenschädigung/-reizung**
Verursacht schwere Augenschäden.
 - **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Zusätzliche toxikologische Hinweise:**
 - **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
 - **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Karzinogenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
 - **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

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- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.


ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**
Wassergefährdungsklasse 1 (Listeneinstufung): schwach wassergefährdend
Nicht unverdünnt bzw. in größeren Mengen in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.
Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.
- **12.6 Andere schädliche Wirkungen** Keine weiteren relevanten Informationen verfügbar.

ABSCHNITT 13: Hinweise zur Entsorgung

- **13.1 Verfahren der Abfallbehandlung**
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.
- **Empfohlenes Reinigungsmittel:** Wasser, gegebenenfalls mit Zusatz von Reinigungsmitteln.

ABSCHNITT 14: Angaben zum Transport

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Nummer · ADR, IMDG, IATA | <p>UNI823</p> |
| <ul style="list-style-type: none"> · 14.2 Ordnungsgemäße UN-Versandbezeichnung · ADR · IMDG, IATA | <p>1823 NATRIUMHYDROXID, FEST
SODIUM HYDROXIDE, SOLID</p> |
| <ul style="list-style-type: none"> · 14.3 Transportgefahrenklassen · ADR, IMDG, IATA | <p>8</p> |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Klasse · Gefahrzettel | <p>8 Ätzende Stoffe
8</p> |
| <ul style="list-style-type: none"> · 14.4 Verpackungsgruppe · ADR, IMDG, IATA | <p>II</p> |

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· 14.5 Umweltgefahren:	Nicht anwendbar.
· 14.6 Besondere Vorsichtsmaßnahmen für den Verwender	Achtung: Ätzende Stoffe
· Nummer zur Kennzeichnung der Gefahr (Kemler-Zahl):	80
· EMS-Nummer:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code	Nicht anwendbar.
· Transport/weitere Angaben:	
· ADR	
· Begrenzte Menge (LQ)	1 kg
· Freigestellte Mengen (EQ)	Code: E2 Höchste Nettomenge je Innenverpackung: 30 g Höchste Nettomenge je Außenverpackung: 500 g
· Beförderungskategorie	2
· Tunnelbeschränkungscode	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 NATRIUMHYDROXID, FEST, 8, II

ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- **Richtlinie 2012/18/EU**
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Der Stoff ist nicht enthalten.
- **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**
Der Stoff ist nicht enthalten.
- **VERORDNUNG (EU) 2019/1148**
- **Anhang I - BESCHRÄNKTE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE (Oberer Konzentrationsgrenzwert für eine Genehmigung nach Artikel 5 Absatz 3)**
Der Stoff ist nicht enthalten.
- **Anhang II - MELDEPFLICHTIGE AUSGANGSSTOFFE FÜR EXPLOSIVSTOFFE**
Der Stoff ist nicht enthalten.
- **Verordnung (EG) Nr. 273/2004 betreffend Drogenausgangsstoffe** Der Stoff ist nicht enthalten.
- **Verordnung (EG) Nr. 111/2005 zur Festlegung von Vorschriften für die Überwachung des Handels mit Drogenaustauschstoffen zwischen der Gemeinschaft und Drittländern**
Der Stoff ist nicht enthalten.
- **Nationale Vorschriften:**
- **Wassergefährdungsklasse: WGK 1 (Listeneinstufung):** schwach wassergefährdend.

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15.2 Stoffsicherheitsbeurteilung: Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

Abkürzungen und Akronyme:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Korrosiv gegenüber Metallen – Kategorie 1

Acute Tox. 4: Akute Toxizität – Kategorie 4

Skin Corr. 1A: Hautreizende/-ätzende Wirkung – Kategorie 1A

Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1

-DE-

Scheda di dati di sicurezza
ai sensi del regolamento 1907/2006/CE, Articolo 31

Stampato il: 16.03.2022

Revisione: 16.03.2022

SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** idrossido di sodio

· **Articolo numero:** 21160, 21160-sp, 21162

· **Numero CAS:**

1310-73-2

· **Numeri CE:**

215-185-5

· **Numero indice:**

011-002-00-6

· **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**

Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: info@emsdiasum.com

www.emsdiasum.com

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: www.sichim.com

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS05 corrosione

Met. Corr.1 H290 Può essere corrosivo per i metalli.

Skin Corr. 1A H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Eye Dam. 1 H318 Provoca gravi lesioni oculari.



GHS07

Acute Tox. 4 H302 Nocivo se ingerito.

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

La sostanza è classificata ed etichettata conformemente al regolamento CLP.

(continua a pagina 2)

Scheda di dati di sicurezza

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Pittogrammi di pericolo


GHS05 GHS07

Avvertenza Pericolo
Indicazioni di pericolo

H290 Può essere corrosivo per i metalli.

H302 Nocivo se ingerito.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Consigli di prudenza

P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle [o fare una doccia].

P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.

P310 Contattare immediatamente un CENTRO ANTIVELENI/un medico.

P321 Trattamento specifico (vedere su questa etichetta).

P405 Conservare sotto chiave.

P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

2.3 Altri pericoli
Risultati della valutazione PBT e vPvB

PBT: Non applicabile.

vPvB: Non applicabile.

SEZIONE 3: Composizione/informazioni sugli ingredienti

3.1 Caratteristiche chimiche: Sostanze
Numero CAS

1310-73-2 idrossido di sodio

Numero/i di identificazione

Numeri CE: 215-185-5

Numero indice: 011-002-00-6

SEZIONE 4: Misure di primo soccorso

4.1 Descrizione delle misure di primo soccorso

Indicazioni generali: Allontanare immediatamente gli abiti contaminati dal prodotto.

Inalazione: Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

Contatto con la pelle: Lavare immediatamente con acqua e sapone sciacquando accuratamente.

Contatto con gli occhi:

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.

Ingestione:

Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.

4.2 Principali sintomi ed effetti, sia acuti che ritardati Non sono disponibili altre informazioni.

4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali

Non sono disponibili altre informazioni.

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SEZIONE 5: Misure antincendio

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Non sono richiesti provvedimenti particolari.

SEZIONE 6: Misure in caso di rilascio accidentale

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**
Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.
- **6.2 Precauzioni ambientali:** Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**
Utilizzare mezzi di neutralizzazione.
Smaltimento del materiale contaminato conformemente al punto 13.
Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**
Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.
Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.
Per informazioni relative allo smaltimento vedere Capitolo 13.

SEZIONE 7: Manipolazione e immagazzinamento

- **7.1 Precauzioni per la manipolazione sicura** Accurata captazione delle polveri.
- **Indicazioni in caso di incendio ed esplosione:** Non sono richiesti provvedimenti particolari.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Non necessario.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

SEZIONE 8: Controllo dell'esposizione/protezione individuale

- **8.1 Parametri di controllo**
- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.

· **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**

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TWA Limite Ceiling: 2 mg/m³

- **Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.

- **8.2 Controlli dell'esposizione**
- **Mezzi protettivi individuali:**
- **Norme generali protettive e di igiene del lavoro:**
Tenere lontano da cibo, bevande e foraggi.
Togliere immediatamente gli abiti contaminati.
Lavarsi le mani prima dell'intervallo o a lavoro terminato.
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:** Non necessario.

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· Guanti protettivi:

Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

· Materiale dei guanti

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro.

· Tempo di permeazione del materiale dei guanti

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

· Occhiali protettivi:

Occhiali protettivi a tenuta

SEZIONE 9: Proprietà fisiche e chimiche

· 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali**· Indicazioni generali****· Aspetto:****Forma:** Pellet**Colore:** Bianco**· Odore:** Inodore**· Soglia olfattiva:** Non definito.**· valori di pH:** Non applicabile.**· Cambiamento di stato****Punto di fusione/punto di congelamento:** 323 °C**Punto di ebollizione iniziale e intervallo di ebollizione:** 1.388 °C**· Punto di infiammabilità:** Non applicabile.**· Infiammabilità (solidi, gas):** Sostanza non infiammabile.**· Temperatura di decomposizione:** Non definito.**· Temperatura di autoaccensione:** Non definito.**· Proprietà esplosive:** Prodotto non esplosivo.**· Limiti di infiammabilità:****Inferiore:** Non definito.**Superiore:** Non definito.**· Tensione di vapore a 800 °C:** 3,5 hPa**· Densità a 20 °C:** 2,13 g/cm³**· Densità relativa** Non definito.

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· Densità di vapore:	Non applicabile.
· Velocità di evaporazione	Non applicabile.
· Solubilità in/Miscibilità con acqua a 20 °C:	420 g/l
· Coefficiente di ripartizione: n-ottanolo/acqua:	Non definito.
· Viscosità:	
· Dinamica:	Non applicabile.
· Cinematica:	Non applicabile.
· 9.2 Altre informazioni	Non sono disponibili altre informazioni.

SEZIONE 10: Stabilità e reattività

- **10.1 Reattività** Non sono disponibili altre informazioni.
- **10.2 Stabilità chimica**
- **Decomposizione termica/ condizioni da evitare:** Il prodotto non si decompone se utilizzato secondo le norme.
- **10.3 Possibilità di reazioni pericolose** Non sono note reazioni pericolose.
- **10.4 Condizioni da evitare** Non sono disponibili altre informazioni.
- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

SEZIONE 11: Informazioni tossicologiche

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta**
Nocivo se ingerito.

· **Valori LD/LC50 rilevanti per la classificazione:**

Orale	LD50	2.000 mg/kg (rat)
-------	------	-------------------

- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**
Provoca gravi ustioni cutanee e gravi lesioni oculari.
- **Lesioni oculari gravi/irritazioni oculari gravi**
Provoca gravi lesioni oculari.
- **Sensibilizzazione respiratoria o cutanea**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Ulteriori dati tossicologici:**
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

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SEZIONE 12: Informazioni ecologiche

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**
Pericolosità per le acque classe 1 (D) (Classif. secondo le liste): poco pericoloso
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature non diluito o in grandi quantità.
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

SEZIONE 13: Considerazioni sullo smaltimento

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.
- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.
- **Detergente consigliato:** Acqua eventualmente con l'aggiunta di detersivi.

SEZIONE 14: Informazioni sul trasporto

- | | |
|---|---|
| · 14.1 Numero ONU
· ADR, IMDG, IATA | UN1823 |
| · 14.2 Nome di spedizione dell'ONU
· ADR
· IMDG, IATA | 1823 IDROSSIDO DI SODIO SOLIDO
SODIUM HYDROXIDE, SOLID |
| · 14.3 Classi di pericolo connesso al trasporto
· ADR, IMDG, IATA | |
|  | |
| · Classe
· Etichetta | 8 Materie corrosive
8 |
| · 14.4 Gruppo di imballaggio
· ADR, IMDG, IATA | II |
| · 14.5 Pericoli per l'ambiente: | Non applicabile. |
| · 14.6 Precauzioni speciali per gli utilizzatori
· N° identificazione pericolo (Numero Kemler):
· Numero EMS:
· Segregation groups | Attenzione: Materie corrosive
80
8-06
Alkalis |

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· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Trasporto di rinfuse secondo l'allegato II di MARPOL ed il codice IBC	Non applicabile.
· Trasporto/ulteriori indicazioni:	
· ADR	
· Quantità limitate (LQ)	1 kg
· Quantità esenti (EQ)	Codice: E2 Quantità massima netta per imballaggio interno: 30 g Quantità massima netta per imballaggio esterno: 500 g
· Categoria di trasporto	2
· Codice di restrizione in galleria	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN 1823 IDROSSIDO DI SODIO SOLIDO, 8, II

SEZIONE 15: Informazioni sulla regolamentazione

- **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**
- **Direttiva 2012/18/UE**
- **Sostanze pericolose specificate - ALLEGATO I** La sostanza non è contenuta
- **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**
La sostanza non è contenuta
- **REGOLAMENTO (UE) 2019/1148**
- **Allegato I - PRECURSORI DI ESPLOSIVI SOGGETTI A RESTRIZIONI (Valore limite superiore ai fini della concessione di licenze a norma dell'articolo 5, paragrafo 3)**
La sostanza non è contenuta
- **Allegato II - PRECURSORI DI ESPLOSIVI SOGGETTI A SEGNALAZIONE** La sostanza non è contenuta
- **Regolamento (CE) n. 273/2004 relativo ai precursori di droghe** La sostanza non è contenuta
- **Regolamento (CE) N. 111/2005 recante norme per il controllo del commercio dei precursori di droghe tra la Comunità e i paesi terzi**
La sostanza non è contenuta
- **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

SEZIONE 16: Altre informazioni

I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.

· **Abbreviazioni e acronimi:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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*CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Met. Corr. 1: Sostanze o miscele corrosive per i metalli – Categoria 1**Acute Tox. 4: Tossicità acuta – Categoria 4**Skin Corr. 1A: Corrosione/irritazione della pelle – Categoria 1A**Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1*

IT

물질안전보건자료
GHS에 따라

인쇄일자: 2022.03.16

개정: 2022.03.16

1 화학제품과 회사에 관한 정보

- 제품 식별자
- 제품명: 수산화 나트륨
- 상품번호: 21160, 21160-sp, 21162
- CAS-번호
1310-73-2
- EC 의번호:
215-185-5
- 색인 번호:
011-002-00-6
- 해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도
- 제품의 권고 용도와 사용상의 제한: Sodium Hydroxide, Pellets, Reagent, A.C.S.
- 제품의 권고 용도와 사용상의 제한: 실험실 화학품
- 안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보
- 제조자/수입자/유통업자 정보:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- Samchang Commercial Co., Ltd.
Yeo Eui Do
PO Box 1110
Seoul, Korea
Tel: 82 2 703 3040
Fax: 82 2 717 3298
-
- Daedok Science, Co. Ltd.
34141 E10 Korea Advanced Institute of Science
Guseong-Dong, Yuseong-gu, Daejeon,
Korea
Phone: 82 42 710 2091
Fax: 82 42 367 0005
Website: www.labsmro.com
- 추가적인 정보 획득 가능: Product safety department
- 비상연락 전화번호:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 유해성·위험성

- 순물질 또는 혼합물의 분류



부식

금속부식성 물질- 구분1 H290 금속을 부식시킬 수 있음
 피부 부식성/피부 자극성 - 구분 1 H314 피부에 심한 화상과 눈에 손상을 일으킴
 심한 눈 손상성/눈 자극성 - 구분1 H318 눈에 심한 손상을 일으킴

(2 쪽에 계속)

물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.16

개정: 2022.03.16

제품명: 수산화 나트륨

(1 쪽부터계속)



급성 독성 - 경구 - 구분4 H302 삼키면 유해함

- 라벨표기 요소
- GHS 라벨 요소 본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- GHS 그림문자



GHS05 GHS07

- 신호어 위험
- 유해·위험문구
금속을 부식시킬 수 있음
삼키면 유해함
피부에 심한 화상과 눈에 손상을 일으킴
- 예방조치문구
피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오 .
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.
즉시 독성물질센터/병원 연락 필요.
(라벨 참조) 처치를 하시오.
밀봉하여 저장하십시오.
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.
- 기타 유해성
- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

3 구성성분의 명칭 및 함유량

- 화학적 특성: 화학물질
- CAS-번호표시
1310-73-2 수산화 나트륨
- 식별 번호
- EC 의번호: 215-185-5
- 색인 번호: 011-002-00-6

4 응급조치 요령

- 응급조치요령 내용
- 일반적 정보: 이 제품에 의해 오염된 의상은 즉시 제거한다.
- 흡입했을 때: 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.
- 피부에 접촉했을 때: 즉시 물과 비누로 씻고 잘 행군다.
- 눈에 들어갔을 때: 흐르는 물에 눈을 몇분동안 씻어내고 나서, 의사와 상담한다
- 먹었을 때: 물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.
- 기타 의사의 주의사항:
- 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.

(3 쪽에계속)

물질안전보건자료 GHS에 따라

인쇄일자: 2022.03.16

개정: 2022.03.16

제품명: 수산화 나트륨

(2 쪽부터계속)

· **즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후** 추가적인 정보가 존재하지 않습니다.

5 폭발·화재시 대처방법

- 소화제
- 적절한 소화제: 주 변 환 경에 맞는 화 재 진 화방 방법을 사용한다.
- 분 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.
- 소방관에 대한 권고사항
- 화재 진압 시 착용할 보호구 및 예방조치: 특 별 한 조 치 가 필 요없음.

6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차 안 전 장 비 착용하고, 무 방 비 의 사 람 은 격 리 시킨다.
- 환경 관련 예방조치: 하수도망/해수면위의물/지하수로도달하지않게한다.
- 밀폐 및 정화 방법과 소재:
 - 중성제를사용한다.
 - 항목 13에 따라 오염된 물질을 쓰레기로 처분한다.
 - 충분한 환기가 되도록 한다.
- 타 섹션 참조
 - 안 전 관 리 에 대 한 정 보 는 제 7 장 을 참 고 하 시 오.
 - 개 인 보 호 장 비 에 대 한 정 보 는 제 8 장 을 참 고 하 시 오.
 - 쓰 레 기 처 리 에 대 한 정 보 는 제 13 장 을 참 고 하 시 오.

7 취급 및 저장방법

- 취급:
 - 안전 취급을 위한 예방조치 철저한 먼지 제거.
 - 화재 및 폭발 사고 예방대책에 관한 정보: 특 별 한 조 치 가 필 요없음.
- 혼합위험성 등 안전 저장 조건
- 보관:
 - 안전한 저장 방법: 특 별 한 요 구 사 항 이 없 음.
 - 하나의 공동 보관 시설에 대한 보관 관련 정보: 필 요없음
 - 보 관 조 건 에 관 한 추 가 적 인 정 보: 용 기 를 새 지 않 게 밀 폐 한 채 보관 한다.
 - 구 체 적 최 종 사 용 자 추 가 적 인 정 보 가 존 재 하 지 않 습 니 다.

8 노출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보: 더 이 상 의 자 료 는 없 음. 항 목 7 을 참 고 하 시 오.
- 통제 변수

· 화학물질의 노출기준, 생물학적 노출기준 등:

1310-73-2 수산화 나트륨

OELV (KR)	최고노출기준: 2 mg/m ³
PEL (US)	장기간의값: 2 mg/m ³
REL (US)	최고노출기준: 2 mg/m ³
TLV (US)	최고노출기준: 2 mg/m ³

· 추 가 정 보: 제 조 할 당 시 에 유효 한 목 록 을 기 초 로 사 용 했 다.

(4 쪽에계속)

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제품명: 수산화 나트륨

(3 쪽부터계속)

- 노출 통제
- 개인 보호구
- 일반적보호조치및위생조치:
 식료품, 음료수와 사료로부터 멀리 떨어져 놓는다.
 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
 휴식 전 이나 작업이 끝날때마다 손을 씻는다.
 눈과 피부와의 접촉은 피한다.
- 호흡기 보호: 필요없음.
- 손 보호:



보호용 장갑

장갑재질은제품 / 원료 / 조제를투과시키지않아야하고, 내구성이있어야한다.
 테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합 물에 적합한 장갑재질에 대한 추천이 없다.
 투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

- 장갑의재료
 적합한장갑의선택은재질차이뿐아니라품질기준의차이도고려하여야이루어져야하고제조업자에따라서도다르게선정되어야한다.
- 장갑 재료의 투과시간 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.
- 눈 보호:



꼭조이는보안경

9 물리화학적 특성

- 기본 물리 및 화학적 특성에 대한 정보
- 일반정보
- 외형
 - 물리적 상태: 겹질
 - 색: 하얀
 - 냄새: 무취의
 - 후각역치: 알맞지않다.
- pH: 해당사항 없음.
- 상태변화
 - 녹는점/어는점: 323 °C
 - 초기 끓는점과 끓는점 범위: 1,388 °C
- 인화점: 해당사항 없음.
- 인화성(고체, 기체): 이 제품은 가 연 성 이 없 다.
- 분해 온도: 알맞지않다.
- 자기점화: 알맞지않다.
- 폭발위험: 이제품은폭발위험성이없다
- 인화 또는 폭발 범위의 상한/하한
 - 아래로: 알맞지않다.
 - 위로: 알맞지않다.

(5 쪽에계속)

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(4 쪽부터계속)

· 증기압 의경우 800 °C:	3.5 hPa
· 밀도 의경우 20 °C:	2.13 g/cm ³
· 비중:	알맞지않다.
· 증기밀도:	해당사항 없음.
· 증발 속도:	해당사항 없음.
· 용해도:	
· 물 의경우 20 °C:	420 g/l
· n 옥탄올/물 분배계수:	알맞지않다.
· 점도:	
· 역학성:	해당사항 없음.
· 동점성:	해당사항 없음.
· 기타 정보	추가적인 정보가 존재하지 않습니다.

10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 위험한반응으로는알려지지않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 금지 물질: 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성있는분해물들은알려지지않았다.

11 독성에 관한 정보

- 독성학적 영향에 대한 정보
- 급성 독성:

· LD/LC50-수치에 따른 분류:
구강의 LD50 2,000 mg/kg (rat)

- 일차적 자극 효과:
- 피부 부식성 또는 자극성: 피부와점막에강한부식작용.
- 심한 눈 손상 또는 자극성: 강한부식작용
- 감각화: 민감한영향이없는것으로알려져있다.
- 추 가 적 인 독성 에 관 한 정보:
삼킬경우식도나위등의내장기관벽에상처를주는위험과마찬가지로입주변이나구강에강한부식작용을한다

12 환경에 미치는 영향

- 독성
- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환 경 시 스템 에 서 의 행 동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양내 이동성 추가적인 정보가 존재하지 않습니다.
- 추가적인 생태학 정보:
- 일반 특징:
수질오염등급 1 (목록분류): 약하게수질오염이된

(6 쪽에계속)

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(5 쪽부터계속)


희석시키지않은채대량으로지하수나, 하천으로그리고하수도망에도달하지않게한다.
희석시키지않은채또는중화시키지않은채하수도나배수에도달하지않게해야한다.

- PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과
- PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.
- vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.
- 기타 부작용 추가적인 정보가 존재하지 않습니다.

13 폐기시 주의사항

- 폐기물 처리 방법
- 권고: 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.
- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.
- 추 천 세정제: 경우에따라서세제가첨가된물

14 운송에 필요한 정보

· 유엔 번호	
· ADR, IMDG, IATA	UN1823
· UN 적정 선정명	
· ADR	1823 SODIUM HYDROXIDE, SOLID
· IMDG, IATA	SODIUM HYDROXIDE, SOLID
· 교통 위험 클래스	
· ADR, IMDG, IATA	
	
· 등급	8 부식작용하는물질
· 위험물 라벨	8
· 용기등급	
· ADR, IMDG, IATA	II
· 환경적 유해물질:	해당사항 없음.
· 이용자 특별 예방조치	경고: 부식작용하는물질
· 위험 코드:	80
· EMS-번호:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송	해당사항 없음.

(7 쪽에계속)

물질안전보건자료 GHS에 따라

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제품명: 수산화 나트륨

(6 쪽부터계속)

· 운 송/추가 정보:	
· ADR	
· 한정 수량 (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· 운송 구분	2
· 터널 제한 코드	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "모범 규제":	UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

15 법적 규제현황

- 산업안전보건법에 의한 규제:
- 제조 등 금지물질: 성분이포함되어있지않다
- 허가대상물질: 성분이포함되어있지않다
- 관리대상유해물질: 성분이포함되어있다
- 작업환경측정 대상 유해인자 1C6
- 특수건강진단 대상 유해인자 성분이포함되어있지않다
- 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률 추가적인 정보가 존재하지 않습니다.
- **Korean Existing Chemical Inventory KE-31487**
- 화학물질관리법
- 사고대비물질 성분이포함되어있지않다
- 금지물질 성분이포함되어있지않다
- 제한물질 성분이포함되어있지않다
- 유독물질 성분이포함되어있다
- 허가물질 성분이포함되어있다
- 등록 또는 신고 면제대상 화학물질 성분이포함되어있지않다
- ‘21년까지 등록하여야 할 암, 돌연변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존화학물질 성분이포함되어있지않다
- 중점관리물질의 지정
- 표1 중점관리물질(제2조 관련) 성분이포함되어있지않다
- 표2 중점관리물질(제2조 관련) 성분이포함되어있지않다
- **GHS 라벨 요소** 본 화학물질은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.
- **GHS 그림문자**



GHS05 GHS07

- 신호어 위험
- 유해·위험문구
금속을 부식시킬 수 있음
삼키면 유해함
피부에 심한 화상과 눈에 손상을 일으킴

(8 쪽에계속)

물질안전보건자료

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(7 쪽부터계속)

· 예방조치문구

- 피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오 .
- 눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.
- 즉시 독성물질센터/병원 연락 필요.
- (라벨 참조) 처치를 하시오.
- 밀봉하여 저장하십시오.
- (지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.
- **· 화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

16 그 밖의 참고사항

이 보고는 우리 지식에 대한 오늘날의 상태에 대하여 평가하고 있다
 하지만 이 보고서는 생산 특성에 관한 보증은 기술하지 않았으며 계약적인 법률 관계에 기반을 두고 있지 않다

· 담당자:

· **최초 작성일자:** 2022.03.16

· **개정 횟수 및 최종 개정일자:** 1 / 2022.03.16

· 약어와 두문자어:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative

KR

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

1 化學品與廠商資料

- 產品識別者
- 化學品中文(英文)名稱, 化學品俗名或商品名: **燒 堿**
- 商品編號: 21160, 21160-sp, 21162
- CAS 編號:
1310-73-2
- 歐盟編號:
215-185-5
- 歐盟編號:
011-002-00-6
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 物質或混合物的用途 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

2 危害辨識資料

· 緊急情況概述:

白色, 丸, 可能腐蝕金屬。吞食有害。造成嚴重皮膚灼傷和眼睛損傷。對水生生物有害。

· GHS危險性類別



腐蝕

金屬腐蝕物 第1級

H290 可能腐蝕金屬

腐蝕/刺激皮膚物質 第1A級

H314 造成嚴重皮膚灼傷和眼睛損傷

嚴重損傷/刺激眼睛物質 第1級

H318 造成嚴重眼睛損傷



急毒性物質(吞食) 第4級

H302 吞食有害

水環境之危害物質(急毒性) 第3級 H402 對水生生物有害

· 標籤要素

- GHS標籤元素 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。

(在 2 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城

(在 1 頁繼續)

· 象形圖



GHS05 GHS07

· 警示詞 危險

· 危險性說明

可能腐蝕金屬

吞食有害

造成嚴重皮膚灼傷和眼睛損傷

對水生生物有害

· 防範說明

· 事故響應

如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。

如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱形眼鏡。繼續清洗。

立即呼叫解毒中心/醫生

專項處置(參見本標示)。

· 安全貯存

加鎖存放。

· 廢棄處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· 其他有害性

· PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果

· PBT(殘留性、生物濃縮性、毒性物質) 不適用的

· vPvB(高殘留性、高生物濃縮性物質): 不適用的

3 成分辨識資料

· 純品

· CAS號 化學名, 通用名

1310-73-2 燒 城

· 鑒別編號:

· 歐盟編號: 215-185-5

· 歐盟編號: 011-002-00-6

4 急救措施

· 應急措施要領

· 總說明: 馬上脫下染有該產品的衣服。

· 吸入: 萬一病人不清醒時, 請讓病人側躺以便移動。

· 皮膚接觸: 馬上用水和肥皂進行徹底的沖洗。

· 眼睛接觸: 張開眼睛在流水下沖洗數分鐘。然後諮詢醫生。

· 食入: 喝大量的清水和提供新鮮的空氣。馬上召喚醫生。

· 給醫生的資料:

· 最重要的急慢性症狀及其影響 無相關詳細資料。

· 需要及時的醫療處理及特別處理的症狀 無相關詳細資料。

-TW-

(在 3 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城

(在 2 頁繼續)

5 滅火措施

- 滅火方法
- 滅火的方法和滅火劑: 使用適合四周環境的滅火措施.
- 特別危險性 無相關詳細資料。
- 特殊滅火方法
- 消防人員特殊的防護裝備: 沒有要求特別的措施.

6 洩漏處理方法

- 保護措施 帶上保護儀器. 讓未受到保護的人們遠離.
- 環境保護措施: 切勿讓其進入下水道/水面或地下水.
- 密封及淨化方法和材料:
使用中和劑.
根據第 13 條條款棄置受汙染物.
確保有足夠的通風裝置.
- 參照其他部分
有關安全處理的資料請參閱第 7 節.
有關個人保護裝備的資料請參閱第 8 節.
有關棄置的資料請參閱第 13 節.

7 安全處置與儲存方法

- 操作處置
- 儲存 徹底除塵.
- 有關火災及防止爆炸的資料: 不需特別的措施.
- 混合危險性等安全儲存條件
- 儲存:
· 儲存庫和容器須要達到的要求: 沒有特別的要求.
- 有關使用一個普通的儲存設施來儲存的資料: 不需要.
- 有關儲存條件的更多資料: 將容器密封.
- 具體的最終用戶 無相關詳細資料。

8 暴露預防措施

- 工程控制方法: 沒有進一步數據;見第 7 項.

· 控制變數

- 在工作場需要監控的限值成分

1310-73-2 燒 城

PEL (TW) PC-TWA: 2 mg/m³OEL (CN) PC-TWA: 2 mg/m³

- 額外的資料: 制作期間有效的清單將作為基礎來使用.

· 遺漏控制

· 個人防護設備:

· 一般保護和衛生措施:

遠離食品、飲料和飼料.

立即除去所有的不潔的和被汙染的衣服.

在休息之前和工作完畢後請清洗雙手.

(在 4 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 堊

(在 3 頁繼續)

- 避免和眼睛及皮膚接觸.
- 呼吸系統防護: 不需要.
- 手防護:



保護手套

- 手套的物料必須是不滲透性的, 且能抵抗該產品/物質/添加劑.
- 基於缺乏測試, 對於產品/制劑/化學混合物, 並不會提供手套材料的建議
- 選擇手套材料時, 請注意材料的滲透時間, 滲濾率和降解參數
- 手套材料 選擇合適的手套不單取決於材料, 亦取決於質量特征, 以及來自哪一間生產廠家
- 滲入手套材料的時間 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間
- 眼睛防護:



密封的護目鏡

9 物理及化學性質

· 有關基本物理及化學特性的資訊

· 一般說明

· 外觀:

- 形狀: 丸
- 顏色: 白色
- 氣味: 無氣味的
- 嗅覺閾限 未決定.

· pH值: 不適用的

· 條件的更改

- 熔點: 323 °C
- 沸點/初沸點和沸程: 1,388 °C

· 閃點: 不適用的

· 可燃性 (固體、氣體): 該產品是不可燃的

· 分解溫度: 未決定.

· 自燃溫度: 未決定.

· 爆炸的危險性: 該產品並沒有爆炸的危險

· 爆炸極限:

- 較低: 未決定.
- 較高: 未決定.

· 蒸氣壓 在 800 °C: 3.5 hPa

· 密度 在 20 °C: 2.13 g/cm³

- 相對密度 未決定.
- 蒸氣密度 不適用的
- 蒸發速率 不適用的

(在 5 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城

(在 4 頁繼續)

- 溶解性
水在 20 °C: 420 g/l
- n-辛醇/水分配係數: 未決定.
- 黏性:
動態: 不適用的
運動學的: 不適用的
- 其他資訊 無相關詳細資料。

10 安定性及反應性

- 反應性 無相關詳細資料。
- 穩定性
- 熱分解/要避免的情況: 如果遵照規格使用則不會分解.
- 有害反應可能性 未有已知的危險反應.
- 應避免的條件 無相關詳細資料。
- 不相容的物質: 無相關詳細資料。
- 危險的分解產物: 未知有危險的分解產品.

11 毒性資料

- 對毒性學影響的資訊
- 急性毒性:

· 與分類相關的 LD/ LC50 值:

口腔	LD50	2,000 mg/kg (rat)
----	------	-------------------

- 主要的刺激性影響:
- 皮膚: 在皮膚和粘膜上造成強烈的腐蝕性影響.
- 在眼睛上面: 強烈的腐蝕性影響.
- 致敏作用: 沒有已知的敏化影響.
- 更多毒物的資料:
吞咽該產品除了導致口部和喉嚨出現強烈的腐蝕性現象之外,還有對食道和胃部造成穿孔的危險.

12 生態資料

- 生態毒性
- 水生毒性: 無相關詳細資料。
- 持久性和降解性 無相關詳細資料。
- 環境系統習性:
- 潛在的生物累積性 無相關詳細資料。
- 土壤內移動性 無相關詳細資料。
- 額外的生態學資料:
- 總括注解:
水危害級別 1(德國規例) (評估): 對水是稍微危害的
不要讓未稀釋或大量的產品接觸地下水、水道或者汗水系統.
不要讓未被稀釋或未被中和的產品接觸下水道或排水溝渠.
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的

(在 6 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城


· 其他副作用 無相關詳細資料。

(在 5 頁繼續)

13 廢棄處置方法

- 廢棄處置方法
- 建議: 不能將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統.
- 受污染的容器和包裝:
- 建議: 必須根據官方的規章來丟棄.
- 建議的清洗劑: 如有必要請使用水及清潔劑進行清潔.

14 運送資料

· 聯合國危險貨物編號(UN號) · ADR, IMDG, IATA	UN1823
· UN適當裝船名 · ADR · IMDG, IATA	1823 SODIUM HYDROXIDE, SOLID SODIUM HYDROXIDE, SOLID
· 運輸危險等級 · ADR, IMDG, IATA	
	
· 級別 · 標籤	8 腐蝕性物質 8
· 包裝組別 · ADR, IMDG, IATA	II
· 環境危害	不適用的
· 用戶特別預防措施 · 危險編碼: · EMS 號碼: · Segregation groups · Stowage Category · Segregation Code	警告: 腐蝕性物質 80 8-06 Alkalis A SG35 Stow "separated from" SGG1-acids
· MARPOL73/78(針對船舶引起的海洋污染預防協約) · 附件書2及根據IBC Code(國際裝船貨物編碼) · 的大量運送	不適用的
· 運輸/額外的資料:	
· ADR · Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

(在 7 頁繼續)

安全資料表

根據 危害性化學品標示及通識規則

打印日期 2022.03.16

在 2022.03.16 審核

化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城

(在 6 頁繼續)

· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "標準規定":	UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

15 法規資料

- 對相應純物質或者混合物的安全、保健及環境法規/法律 無相關詳細資料。
- 優先管理化學品之指定及運作管理辦法
- 附表一-對於未滿十八歲及妊娠或分娩後未滿一年女性勞工具危害性之化學品 沒有列出物質。
- 第二條第二款第一目 沒有列出物質。
- 第二條第二款第二目 有列出物質。
- 新化學物質及既有化學物質資料登錄辦法 英 沒有列出物質。
- 中國現有化學物質名錄 有列出物質。
- TCSCA
- 列管編號 沒有列出物質。
- 毒性分類 沒有列出物質。
- 管制濃度(w/w%) 沒有列出物質。
- 大量運作基準(公斤) 沒有列出物質。
- 新化學物質及既有化學物質資料登錄辦法, 附表六 沒有列出物質。
- TCSI - Taiwan Chemical Substance Inventory 有列出物質。
- GHS標籤元素 本化學物質根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 象形圖



GHS05 GHS07

- 警示詞 危險
- 危險性說明
可能腐蝕金屬
吞食有害
造成嚴重皮膚灼傷和眼睛損傷
對水生生物有害
- 防範說明
- 事故響應
如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。
如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱型眼鏡。繼續清洗。
立即呼叫解毒中心/醫生
專項處置(參見本標示)。
- 安全貯存
加鎖存放。
- 廢棄處置
按照地方/區域/國家/國際法規處理內容物之廢棄/容器。
- 化學物質安全性評價: 尚未進行化學物質安全性評價

TW

(在 8 頁繼續)

安全資料表

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化學品中文(英文)名稱, 化學品俗名或商品名: 燒 城

(在 7 頁繼續)

16 其他資料

該資料是基於我們目前的知識

然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係.

· 聯絡:

· 縮寫:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

金屬腐蝕物 第1級: Corrosive to metals – Category 1

急毒性物質(吞食) 第4級: Acute toxicity – Category 4

腐蝕/刺激皮膚物質 第1A級: Skin corrosion/irritation – Category 1A

嚴重損傷/刺激眼睛物質 第1級: Serious eye damage/eye irritation – Category 1

水環境之危害物質(急毒性) 第3級: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

TW

Ficha de dados de segurança
em conformidade com 1907/2006/CE, Artigo 31º

data da impressão 16.03.2022

Revisão: 16.03.2022

SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** hidróxido de sódio
- **Código do produto:** 21160, 21160-sp, 21162
- **Nº CAS:**
1310-73-2
- **Número CE:**
215-185-5
- **Número de índice:**
011-002-00-6
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS05 corrosão

Met. Corr.1 H290 Pode ser corrosivo para os metais.
Skin Corr. 1A H314 Provoca queimaduras na pele e lesões oculares graves.
Eye Dam. 1 H318 Provoca lesões oculares graves.



GHS07

Acute Tox. 4 H302 Nocivo por ingestão.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**
A substância classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS05 GHS07

- **Palavra-sinal** Perigo

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· **Advertências de perigo**

- H290 *Pode ser corrosivo para os metais.*
- H302 *Nocivo por ingestão.*
- H314 *Provoca queimaduras na pele e lesões oculares graves.*

· **Recomendações de prudência**

- P303+P361+P353 *SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): Retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água [ou tomar um duche].*
- P305+P351+P338 *SE ENTRAR EM CONTACTO COM OS OLHOS: Enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continue a enxaguar.*
- P310 *Contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.*
- P321 *Tratamento específico (ver no presente rótulo).*
- P405 *Armazenar em local fechado à chave.*
- P501 *Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.*

· **2.3 Outros perigos**

· **Resultados da avaliação PBT e mPmB**

- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.

SECÇÃO 3: Composição/informação sobre os componentes

· **3.1 Caracterização química: Substâncias**

- **Designação CAS n°**
1310-73-2 hidróxido de sódio
- **Número(s) de identificação**
- **Número CE:** 215-185-5
- **Número de índice:** 011-002-00-6

SECÇÃO 4: Medidas de primeiros socorros

· **4.1 Descrição das medidas de primeiros socorros**

- **Indicações gerais:** O vestuário contaminado com substâncias perigosas deve ser imediatamente removido.
- **Em caso de inalação:**
Se a vítima estiver inconsciente, posicione-a e transporte-a com estabilidade, deitada lateralmente.
- **Em caso de contacto com a pele:** Lavar imediatamente com água e sabão e enxaguar abundantemente.
- **Em caso de contacto com os olhos:**
Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas, e consultar o médico.
- **Em caso de ingestão:** Beber bastante água e respirar ar fresco. Consultar imediatamente um médico.
- **4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados**
Não existe mais nenhuma informação relevante disponível.
- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**
Não existe mais nenhuma informação relevante disponível.

SECÇÃO 5: Medidas de combate a incêndios

· **5.1 Meios de extinção**

- **Meios adequados de extinção:** Coordenar no local medidas para extinção do fogo.
- **5.2 Perigos especiais decorrentes da substância ou mistura**
Não existe mais nenhuma informação relevante disponível.

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- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** Não são necessárias medidas especiais.

SECÇÃO 6: Medidas a tomar em caso de fugas acidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência**
Usar equipamento de protecção. Manter as pessoas desprotegidas afastadas.
- **6.2 Precauções a nível ambiental:** Evitar que penetre na canalização / águas superficiais / águas subterrâneas.
- **6.3 Métodos e materiais de confinamento e limpeza:**
Aplicar um agente de neutralização.
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.
Assegurar uma ventilação adequada.
- **6.4 Remissão para outras secções**
Para informações sobre uma manipulação segura, ver o capítulo 7.
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.
Para informações referentes à eliminação residual, ver o capítulo 13.

SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro** Remover completamente o pó.
- **Precauções para prevenir incêndios e explosões:** Não são necessárias medidas especiais.
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não necessário.
- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.
- **7.3 Utilização(ões) final(is) específica(s)** Não existe mais nenhuma informação relevante disponível.

SECÇÃO 8: Controlo da exposição/Protecção individual

- **8.1 Parâmetros de controlo**
- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.

· **Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:**

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VLE Valor limite de exposição – concentração máxima: 2 mg/m³

Irritação ocular, do TRS, cutânea

- **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.

- **8.2 Controlo da exposição**
- **Equipamento de protecção individual:**
- **Medidas gerais de protecção e higiene:**
Manter afastado de alimentos, bebidas e forragens.
Despir imediatamente a roupa contaminada e embebida.
Lavar as mãos antes das pausas e no fim do trabalho.
Evitar o contacto com os olhos e com a pele.
- **Protecção respiratória:** Não necessário.

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· **Protecção das mãos:**

Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

· **Material das luvas**

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante.

· **Tempo de penetração no material das luvas**

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

· **Protecção dos olhos:**

Óculos de protecção totalmente fechados

SECÇÃO 9: Propriedades físico-químicas

· **9.1 Informações sobre propriedades físicas e químicas de base**· **Informações gerais**· **Aspetto:**

· Forma:	Pellets
· Cor:	Branco
· Odor:	Inodoro
· Limiar olfactivo:	Não determinado.

· **valor pH:** Não aplicável.

· **Mudança do estado:**

· Ponto de fusão/ponto de congelação:	323 °C
· Ponto de ebulição inicial e intervalo de ebulição:	1.388 °C

· **Ponto de inflamação:** Não aplicável.

· **Inflamabilidade (sólido, gás):** A substância não é inflamável.

· **Temperatura de decomposição:** Não determinado.

· **Temperatura de autoignição:** Não determinado.

· **Propriedades explosivas:** O produto não corre o risco de explosão.

· **Limites de explosão:**

· Inferior:	Não determinado.
· Superior:	Não determinado.

· **Pressão de vapor em 800 °C:** 3,5 hPa

· Densidade em 20 °C:	2,13 g/cm ³
· Densidade relativa	Não determinado.
· Densidade de vapor	Não aplicável.
· Taxa de evaporação:	Não aplicável.

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· Solubilidade em / miscibilidade com água em 20 °C:	420 g/l
· Coeficiente de partição: n-octanol/água	Não determinado.
· Viscosidade:	
Dinâmico:	Não aplicável.
Cinemático:	Não aplicável.
· 9.2 Outras informações	Não existe mais nenhuma informação relevante disponível.

SECÇÃO 10: Estabilidade e reactividade

- 10.1 Reactividade Não existe mais nenhuma informação relevante disponível.
- 10.2 Estabilidade química
- Decomposição térmica / condições a evitar: Não existe decomposição se usado de acordo com as especificações.
- 10.3 Possibilidade de reações perigosas Não se conhecem reações perigosas.
- 10.4 Condições a evitar Não existe mais nenhuma informação relevante disponível.
- 10.5 Materiais incompatíveis: Não existe mais nenhuma informação relevante disponível.
- 10.6 Produtos de decomposição perigosos: Não se conhecem produtos de decomposição perigosos.

SECÇÃO 11: Informação toxicológica

- 11.1 Informações sobre os efeitos toxicológicos
- Toxicidade aguda
Nocivo por ingestão.

· Valores LD/LC50 relevantes para a classificação:

por via oral	LD50	2.000 mg/kg (rat)
--------------	------	-------------------

- Efeito de irritabilidade primário:
- Corrosão/irritação cutânea
Provoca queimaduras na pele e lesões oculares graves.
- Lesões oculares graves/irritação ocular
Provoca lesões oculares graves.
- Sensibilização respiratória ou cutânea
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Avisos adicionais de toxicologia:
- Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)
- Mutagenicidade em células germinativas
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Carcinogenicidade Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Toxicidade reprodutiva Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Toxicidade para órgãos-alvo específicos (STOT) - exposição única
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- Perigo de aspiração Com base nos dados disponíveis, os critérios de classificação não são preenchidos.

SECÇÃO 12: Informação ecológica

- 12.1 Toxicidade
- Toxicidade aquática: Não existe mais nenhuma informação relevante disponível.

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- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**
Classe de perigo para a água 1 (D) (classificação pelas listas): pouco perigoso para a água
Não deixar chegar substâncias concentradas, ou seja quantidades grandes, às águas subterrâneas, aos cursos de água ou à canalização.
Substâncias concentradas, ou seja não neutralizadas, não podem chegar aos esgotos nem às águas.
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.
- **Meio de limpeza recomendado:** Água, eventualmente com adição de produtos de limpeza

SECÇÃO 14: Informações relativas ao transporte

- | | |
|--|---|
| <ul style="list-style-type: none"> · 14.1 Número ONU · ADR, IMDG, IATA | UN1823 |
| <ul style="list-style-type: none"> · 14.2 Designação oficial de transporte da ONU · ADR · IMDG, IATA | 1823 HIDRÓXIDO DE SÓDIO, SÓLIDO
SODIUM HYDROXIDE, SOLID |
| <ul style="list-style-type: none"> · 14.3 Classes de perigo para efeitos de transporte · ADR, IMDG, IATA | |
| | |
| <ul style="list-style-type: none"> · Classe · Rótulo | 8 Matérias corrosivas
8 |
| <ul style="list-style-type: none"> · 14.4 Grupo de embalagem · ADR, IMDG, IATA | II |
| <ul style="list-style-type: none"> · 14.5 Perigos para o ambiente: | Não aplicável. |
| <ul style="list-style-type: none"> · 14.6 Precauções especiais para o utilizador · Número de identificação de perigo (Nº Kemler): · Nº EMS: · Segregation groups · Stowage Category · Segregation Code | Atenção: Matérias corrosivas
80
8-06
Alkalis
A
SG35 Stow "separated from" SGG1-acids |

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· **14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC** Não aplicável.

· **Transporte/outras informações:**

· **ADR**

· **Quantidades Limitadas (LQ)**

1 kg

· **Quantidades exceptuadas (EQ)**

Código: E2

Quantidade líquida máxima por embalagem interior: 30 g

Quantidade líquida máxima por embalagem exterior: 500 g

· **Categoria de transporte**

2

· **Código de restrição em túneis**

E

· **IMDG**

· **Limited quantities (LQ)**

1 kg

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· **UN "Model Regulation":**

UN 1823 HIDRÓXIDO DE SÓDIO, SÓLIDO, 8, II

SECÇÃO 15: Informação sobre regulamentação

· **15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente**

· **Diretiva 2012/18/UE**

· **Substâncias perigosas designadas - ANEXO I** A substância não está listada.

· **Directiva 2011/65/UE relativa à restrição do uso de determinadas substâncias perigosas em equipamentos eléctricos e electrónicos - Anexo II**

A substância não está listada.

· **REGULAMENTO (UE) 2019/1148**

· **Anexo I - PRECURSORES DE EXPLOSIVOS OBJETO DE RESTRIÇÕES (Valor-limite máximo para efeitos de licenciamento nos termos do artigo 5.o, n.o 3)**

A substância não está listada.

· **Anexo II - PRECURSORES DE EXPLOSIVOS PASSÍVEIS DE PARTICIPAÇÃO**

A substância não está listada.

· **Regulamento (CE) n.º 273/2004 relativo aos precursores de drogas** A substância não está listada.

· **Regulamento (CE) n.º 111/2005 que estabelece regras de controlo do comércio de precursores de drogas entre a Comunidade e países terceiros**

A substância não está listada.

· **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.

SECÇÃO 16: Outras informações

As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.

· **Abreviaturas e acrónimos:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

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*LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Met. Corr. 1: Corrosivo para os metais – Categoria 1**Acute Tox. 4: Toxicidade aguda – Categoria 4**Skin Corr. 1A: Corrosão/irritação cutânea – Categoria 1A**Eye Dam. 1: Lesões oculares graves/irritação ocular – Categoria 1*

PT

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SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

· 1.1 Identificador del producto

- **Nombre comercial:** hidróxido de sodio
- **Número del artículo:** 21160, 21160-sp, 21162
- **Número CAS:**
1310-73-2
- **Número CE:**
215-185-5
- **Número de clasificación:**
011-002-00-6

· 1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados

No existen más datos relevantes disponibles.

- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio

· 1.3 Datos del proveedor de la ficha de datos de seguridad

· **Fabricante/distribuidor:**

Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com

Aname

C/ Perez Galdos no. 2
28693 Quijorna
Madrid, Spain
Tel: +34.91.816.89.50
Fax: +34.91.816.85.94
email: ventas@aname.es

- **Área de información:** Product safety department

· 1.4 Teléfono de emergencia:

ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

SECCIÓN 2: Identificación de los peligros

· 2.1 Clasificación de la sustancia o de la mezcla

- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS05 corrosión

Met. Corr.1 H290 Puede ser corrosivo para los metales.

Skin Corr. 1A H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

Eye Dam. 1 H318 Provoca lesiones oculares graves.



GHS07

Acute Tox. 4 H302 Nocivo en caso de ingestión.

· 2.2 Elementos de la etiqueta

- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**

La sustancia se ha clasificado y etiquetado de conformidad con el reglamento CLP.

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· **Pictogramas de peligro**

GHS05 GHS07

· **Palabra de advertencia Peligro**· **Indicaciones de peligro**

H290 Puede ser corrosivo para los metales.

H302 Nocivo en caso de ingestión.

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

· **Consejos de prudencia**

P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente toda la ropa contaminada. Enjuagar la piel con agua [o ducharse].

P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.

P310 Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.

P321 Se necesita un tratamiento específico (ver en esta etiqueta).

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **2.3 Otros peligros**· **Resultados de la valoración PBT y mPmB**· **PBT:** No aplicable.· **mPmB:** No aplicable.

SECCIÓN 3: Composición/información sobre los componentes

· **3.1 Caracterización química: Sustancias**· **Denominación N° CAS**

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· **Número(s) de identificación**· **Número CE:** 215-185-5· **Número de clasificación:** 011-002-00-6

SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**· **Instrucciones generales:** Quitarse de inmediato toda prenda contaminada con el producto.· **En caso de inhalación del producto:**

Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.

· **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.· **En caso de con los ojos:**

Limpiar los ojos abiertos durante varios minutos con agua corriente y consultar un médico.

· **En caso de ingestión:** Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.· **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.· **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente**

No existen más datos relevantes disponibles.

ES

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SECCIÓN 5: Medidas de lucha contra incendios

- **5.1 Medios de extinción**
- **Sustancias extintoras apropiadas:** Combatir los incendios con medidas adaptados al ambiente circundante.
- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** No se requieren medidas especiales.

SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia**
Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.
- **6.2 Precauciones relativas al medio ambiente:**
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**
Utilizar un neutralizador.
Desechar el material contaminado como vertido según item 13.
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**
Ver capítulo 7 para mayor información sobre una manipulación segura.
Ver capítulo 8 para mayor información sobre el equipo personal de protección.
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura** Desempolvar cuidadosamente.
- **Prevención de incendios y explosiones:** No se requieren medidas especiales.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No es necesario.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

SECCIÓN 8: Controles de exposición/protección individual

- **8.1 Parámetros de control**
- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**
Sin datos adicionales, ver punto 7.

· **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

1310-73-2 hidróxido de sodio

LEP Valor de corta duración: 2 mg/m³

- **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.
- **8.2 Controles de la exposición**
- **Equipo de protección individual:**
- **Medidas generales de protección e higiene:**
Mantener alejado de alimentos, bebidas y alimentos para animales.
Quitarse de inmediato la ropa ensuciada o impregnada.

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Lavarse las manos antes de las pausas y al final del trabajo.

Evitar el contacto con los ojos y la piel.

· **Protección respiratoria:** No es necesario.

· **Protección de manos:**



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / sustancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de sustancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

· **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro.

· **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

· **Protección de ojos:**



Gafas de protección herméticas

SECCIÓN 9: Propiedades físicas y químicas

· **9.1 Información sobre propiedades físicas y químicas básicas**

· **Datos generales**

· **Aspecto:**

· **Forma:** Pellets

· **Color:** Blanco

· **Olor:** Inodoro

· **Umbral olfativo:** No determinado.

· **valor pH:** No aplicable.

· **Cambio de estado**

· **Punto de fusión/punto de congelación:** 323 °C

· **Punto inicial de ebullición e intervalo de ebullición:** 1.388 °C

· **Punto de inflamación:** No aplicable.

· **Inflamabilidad (sólido, gas):** La sustancia no es inflamable.

· **Temperatura de descomposición:** No determinado.

· **Temperatura de auto-inflamación:** No determinado.

· **Propiedades explosivas:** El producto no es explosivo.

· **Límites de explosión:**

· **Inferior:** No determinado.

· **Superior:** No determinado.

· **Presión de vapor a 800 °C:** 3,5 hPa

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· Densidad a 20 °C:	2,13 g/cm ³
· Densidad relativa	No determinado.
· Densidad de vapor	No aplicable.
· Tasa de evaporación:	No aplicable.
· Solubilidad en / miscibilidad con agua a 20 °C:	420 g/l
· Coefficiente de reparto: n-octanol/agua:	No determinado.
· Viscosidad:	
Dinámica:	No aplicable.
Cinemática:	No aplicable.
· 9.2 Otros datos	No existen más datos relevantes disponibles.

SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** No se conocen reacciones peligrosas.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda**
Nocivo en caso de ingestión.

· **Valores LD/LC50 (dosis letal /dosis letal = 50%) relevantes para la clasificación:**

Oral	LD50	2.000 mg/kg (rat)
------	------	-------------------

- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**
Provoca quemaduras graves en la piel y lesiones oculares graves.
- **Lesiones o irritación ocular graves**
Provoca lesiones oculares graves.
- **Sensibilización respiratoria o cutánea**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Indicaciones toxicológicas adicionales:**
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

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· **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

SECCIÓN 12: Información ecológica

· **12.1 Toxicidad**· **Toxicidad acuática:** No existen más datos relevantes disponibles.· **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.· **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.· **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.· **Indicaciones medioambientales adicionales:**· **Indicaciones generales:**

Nivel de riesgo para el agua 1 (clasificación de listas): escasamente peligroso para el agua

En estado no diluido o no neutralizado, no dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados.

En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.

· **12.5 Resultados de la valoración PBT y mPmB**· **PBT:** No aplicable.· **mPmB:** No aplicable.· **12.6 Otros efectos adversos** No existen más datos relevantes disponibles.

SECCIÓN 13: Consideraciones relativas a la eliminación

· **13.1 Métodos para el tratamiento de residuos**· **Recomendación:** No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.· **Embalajes sin limpiar:**· **Recomendación:** Eliminar conforme a las disposiciones oficiales.· **Producto de limpieza recomendado:** Agua, eventualmente añadiendo productos de limpieza.

SECCIÓN 14: Información relativa al transporte

· **14.1 Número ONU**· **ADR, IMDG, IATA**

UN1823

· **14.2 Designación oficial de transporte de las Naciones Unidas**· **ADR**

1823 HIDRÓXIDO SÓDICO SÓLIDO

· **IMDG, IATA**

SODIUM HYDROXIDE, SOLID

· **14.3 Clase(s) de peligro para el transporte**· **ADR, IMDG, IATA**· **Clase**

8 Materias corrosivas

· **Etiqueta**

8

· **14.4 Grupo de embalaje**· **ADR, IMDG, IATA**

II

· **14.5 Peligros para el medio ambiente:**

No aplicable.

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· 14.6 Precauciones particulares para los usuarios	Atención: Materias corrosivas
· Número de identificación de peligro (Número Kemler):	80
· Número EMS:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids

· 14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC	No aplicable.
--	---------------

· Transporte/datos adicionales:

· ADR	
· Cantidades limitadas (LQ)	1 kg
· Cantidades exceptuadas (EQ)	Código: E2 Cantidad neta máxima por envase interior: 30 g Cantidad neta máxima por embalaje exterior: 500 g
· Categoría de transporte	2
· Código de restricción del túnel	E

· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g

· "Reglamentación Modelo" de la UNECE:	UN 1823 HIDRÓXIDO SÓDICO SÓLIDO, 8, II
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SECCIÓN 15: Información reglamentaria

- 15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla
- Directiva 2012/18/UE
- Sustancias peligrosas nominadas - ANEXO I No contiene la sustancia.
- Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II
No contiene la sustancia.
- REGLAMENTO (UE) 2019/1148
- Anexo I - PRECURSORES DE EXPLOSIVOS RESTRINGIDOS (Valor límite superior a efectos de la concesión de licencias con arreglo al artículo 5, apartado 3)
No contiene la sustancia.
- Anexo II - PRECURSORES DE EXPLOSIVOS NOTIFICABLES No contiene la sustancia.
- Reglamento (CE) no 273/2004 sobre precursores de drogas No contiene la sustancia.
- Reglamento (CE) N o 111/2005 por el que establecen normas para la vigilancia del comercio de precursores de drogas entre la Comunidad y terceros países
No contiene la sustancia.
- 15.2 Evaluación de la seguridad química: Una evaluación de la seguridad química no se ha llevado a cabo.

SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

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· Abreviaturas y acrónimos:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosivos para los metales – Categoría 1

Acute Tox. 4: Toxicidad aguda – Categoría 4

Skin Corr. 1A: Corrosión o irritación cutáneas – Categoría 1A

Eye Dam. 1: Lesiones oculares graves o irritación ocular – Categoría 1

ES

Güvenlik bilgi formu
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Bölüm 1: Maddenin/karışımın ve şirketin/dağıtıcının tanımı

- **1.1 Madde/Karışım kimliği**
- **Ticari adı: sodyum hidroksit**
- **Mal numarası: 21160, 21160-sp, 21162**
- **CAS - numarası:**
1310-73-2
- **EC Numarası:**
215-185-5
- **AT - numarası:**
011-002-00-6
- **1.2 Maddenin veya karışımın ilgili tanımlanmış kullanımları ve tavsiye edilmeyen kullanımları**
Daha başka önemli bilgi mevcut değildir.
- **Maddenin Kullanımı / Hazırlanması** Laboratuarda kullanılan kimyasal maddeler
- **1.3 Güvenlik bilgi formu sağlayıcısının detayları**
- **Üretici / Teslimatı yapan:**
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- **Güvenlik hakkında bilgiler veren kesim: Product safety department**
- **1.4 Acil telefon numarası**
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

Bölüm 2: Zararların tanımı

- **2.1 Madde veya karışımın sınıflandırılması**
- **Düzenlemeye göre sınıflandırma (EC) No 1272/2008**



GHS05 Aşınma

Met. Corr.1 H290 Metalleri aşındırabilir.

Skin Corr. 1A H314 Ciddi cilt yanıklarına ve göz hasarına yol açar.

Eye Dam. 1 H318 Ciddi göz hasarına yol açar.



GHS07

Acute Tox. 4 H302 Yutulması halinde zararlıdır.

- **2.2 Etiket bilgileri**
- **Yönetmelik (EC) No 1272/2008'e göre etiketleme**
Madde SEA yönetmeliğine göre sınıflandırılmış ve etiketlenmiştir.

(Devamı sayfa 2 'da)

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(Sayfa 1 'nin devamı)

· Zararlılık İşaretleri

GHS05 GHS07

· Uyarı Kelimesi Tehlike**· Zararlılık İfadesi**

H290 Metalleri aşındırabilir.

H302 Yutulması halinde zararlıdır.

H314 Ciddi cilt yanıklarına ve göz hasarına yol açar.

· Önlem İfadesi

P303+P361+P353 CİLT [veya saç] ÜZERİNDE İSE: Bütün kirlenmiş giysileri hemen çıkarın. Cildi su ile durulayın [veya duş alın].

P305+P351+P338 GÖZLERDE İSE: birkaç dakika su ile dikkatlice durulayın. Kontakt lens varsa ve kolaysa çıkartın. Durulamaya devam edin.

P310 Hemen ULUSAL ZEHİR DANIŞMA MERKEZİNİN 114 NOLU TELEFONUNU/doktoru arayın.

P321 Özel müdahale gerekli (etikete bakın).

P405 Kilit altında saklayın.

P501 İçeriği/kabı yerel/bölgesel/ulusal/uluslararası mevzuata uygun şekilde bertaraf edin.

· 2.3 Diğer zararlar**· PBT ve vPvB değerlendirmesi sonuçları**· **PBT:** Uygulanamaz.· **vPvB:** Uygulanamaz.**Bölüm 3: Bileşimi/İçindekiler hakkında bilgi****· 3.1 Maddeler****· CAS-No. tanımı**

1310-73-2 sodyum hidroksit

· Teşhis numarası· **EC Numarası:** 215-185-5· **AT - numarası:** 011-002-00-6**Bölüm 4: İlk yardım önlemleri****· 4.1 İlk yardım önlemlerinin tanıtımı**· **Genel uyarılar:** Ürünün bulaşmış olduğu giyim eşyalarını derhal uzaklaştırınız.· **Teneffüs etikten sonra:** Baygınlık halinde yatırılması ve taşınması sabit yan pozisyonda olmalıdır.· **Cilde temas etikten sonra:** Derhal su ve sabunla yıkayarak iyice durulayınız.**· Gözlere temas ettikten sonra:**

Gözleri, gözkapakları açık bir şekilde birkaç dakika süreyle akan suyun altına tutunuz ve doktora başvurunuz.

· **Yuttuktan sonra:** Bolca su içiniz ve temiz hava alınız. Derhal doktor çağırınız.· **4.2 Akut ve sonradan görülen en önemli belirtiler ve etkiler** Daha başka önemli bilgi mevcut değildir.· **4.3 Acil tıbbi müdahale ve özel tedavi gereği için işaretler** Daha başka önemli bilgi mevcut değildir.

TR

(Devamı sayfa 3 'da)

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(Sayfa 2 'nin devamı)

Bölüm 5: Yangınla mücadele önlemleri

- **5.1 Yangın söndürücüler**
- **Elverişli söndürücü maddeler:** Yangın söndürme önlemlerini çevreye uydurunuz.
- **5.2 Madde veya karışımdan kaynaklanan özel zararlar** Daha başka önemli bilgi mevcut değildir.
- **5.3 Yangın söndürme ekipleri için tavsiyeler**
- **Özel koruyucu teçhizat:** Özel önlemlerin alınması gerekmez.

Bölüm 6: Kaza sonucu yayılma önlemleri

- **6.1 Kişisel önlemler, koruyucu ekipman ve acil müdahale planı**
Koruyucu teçhizat takınız. Korunmamış şahısları yaklaştırmayınız.
- **6.2 Çevresel önlemler** Kanalizasyona/Yüzeysel suya/Yeraltı suyuna karışmasını önleyiniz.
- **6.3 Kontrol altında tutma ve temizleme için yöntem ve malzemeler**
Nötürleyici madde uygulayınız.
Zararlı madde karışmış malzemeyi çöp olarak madde 13 'e göre tasfiye ediniz.
Yeterli havalandırma sağlayınız.
- **6.4 Diğer bölümlere atıflar**
Güvenli kullanım ile ilgili bilgileri 7. bölümden alınız.
Kişisel koruyucu teçhizat ile ilgili bilgileri 8. bölümden alınız.
Tasfiye ile ilgili bilgileri 13. bölümden alınız.

Bölüm 7: Elleçleme ve depolama

- **7.1 Güvenli elleçleme için önlemler** Tozdan arınma iyi yapılmalıdır.
- **Yangın ve patlamadan korunmak için uyarılar:** Özel önlemlerin alınması gerekmez.
- **7.2 Birlikte bulunmaması gereken maddeleri de içeren güvenli depolama koşulları**
- **Depolama:**
- **Depolarda ve kaplarda aranan özellikler:** Belirli şartlar aranmaz.
- **Birarada depolama ile ilgili uyarılar:** Gerekli değil.
- **Depolama şartları ile ilgili diğer bilgiler:** Kabı sızdırmayacak şekilde kapalı tutunuz.
- **7.3 Belirli son kullanımlar** Daha başka önemli bilgi mevcut değildir.

Bölüm 8: Maruz kalma kontrolü/kişisel korunma

- **8.1 Kontrol parametreleri**
- **Teknik tesisatların şekillendirilmesi ile ilgili ek bilgiler:** Başka bilgi yoktur, madde 7 'den bakınız.
- **Çalışma yeri ile ilgili, kontrol edilmesi gereken sınır değerleri olan bileşenler:** Kalkmıştır.
- **Ek uyarılar:** Düzenlendiği tarihte geçerli listeler esas alınmıştır.
- **8.2 Maruz kalma kontrolü**
- **Kişisel koruyucu teçhizat:**
- **Genel koruyucu ve sıhhi önlemler:**
Gıda maddelerinden, içeceklerden ve yem maddelerinden uzak tutunuz.
Kirlenmiş, sıvı bulaşmış giyim eşyalarını derhal çıkartınız.
Molalardan önce ve mesai sonunda ellerinizi yıkayınız.
Gözlerinize ve cildinize değmesinden kaçınınız.
- **Nefes koruyucu önlemler:** Gerekli değildir.

(Devamı sayfa 4 'da)

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(Sayfa 3 'nin devamı)

· Elleri koruyucu:

Koruyucu eldivenler

Eldiven malzemesi ürün / malzeme / hazırlanan madde ile ilgili olarak geçirmez ve dayanıklı olmalıdır. Testlerin yapılmamış olması nedeni ile ürün / hazırlanmış madde / kimyasal karışım için lâzım olan eldiven imalatında kullanılması gereken malzeme ile ilgili herhangi bir tavsiye yapılamamaktadır. Eldiven imalatı için kullanılan malzemelerin seçiminde delinme sürelerinin, geçirgenlik oranlarının ve bozulmanın göz önüne alınması gereklidir.

· Eldiven malzemesi

Uygun eldivenin seçiminde yalnız imalat malzemesi değil, aynı zamanda diğer kalite özellikleri de dikkate alınmalıdır ve bunlar imalatçıdan imalatçıya değişiklik göstermektedir.

· Eldiven malzemesine nüfuz etme süresi

Kesin delinme (aşınma) süresi eldiven imalatçısından öğrenilmeli ve bu sürelere riayet edilmelidir.

· Gözleri koruyucu:

Kenarları tam kapatan koruyucu gözlük

Bölüm 9: Fiziksel ve kimyasal özellikler**· 9.1 Temel fiziksel ve kimyasal özellikler hakkında bilgi****· Genel bilgiler****· Görünüm**

Biçim:	Taneler
Renk:	Beyaz
Koku:	Kokusuz
Koku eşliği	Belirli değil.

· pH - değeri: Uygulanamaz.**· Durum değişikliği**

Erime noktası/donma noktası	323 °C
İlk kaynama noktası ve kaynama aralığı	1.388 °C

· Parlama noktası Uygulanamaz.**· Alevlenirlik (katt, gaz)** Madde tutuşmaz niteliktedir.**· Bozunma sıcaklığı** Belirli değil.**· Kendiliğinden tutuşma sıcaklığı** Belirli değil.**· Patlayıcı özellikler** Ürünün patlama tehlikesi yoktur.**· Patlama sınırları:**

Alt:	Belirli değil.
Üst:	Belirli değil.

· Buhar basıncı 800 °C'de: 3,5 hPa**· Yoğunluk 20 °C'de:** 2,13 g/cm³

(Devamı sayfa 5 'da)

Güvenlik bilgi formu
23 Haziran 2017 tarihli, 30105 sayılı, „Kimyasalların Kaydı, Değerlendirilmesi, İzni Ve Kisitlanması Hakkında Yönetmelik, Madde 27“ hükümlerine uygun düzenlenmiştir

Baskı tarihi: 16.03.2022

Form No.: 21160

Yeniden düzenleme tarihi: 16.03.2022

Ticari adı: sodyum hidroksit

(Sayfa 4 'nin devamı)

· Bağıl yoğunluk	Belirli değil.
· Buhar yoğunluğu	Uygulanamaz.
· Buharlaştırma hızı	Uygulanamaz.
· Çözülme kabiliyeti / karışma kabiliyeti suyla 20 °C'de:	420 g/l
· Dağılım katsayısı: n-oktanol/su	Belirli değil.
· Akışkanlık	
Dinamik:	Uygulanamaz.
Kinematik:	Uygulanamaz.
· 9.2 Diğer bilgiler	Daha başka önemli bilgi mevcut değildir.

Bölüm 10: Kararlılık ve tepkime

- **10.1 Tepkime** Daha başka önemli bilgi mevcut değildir.
- **10.2 Kimyasal kararlılık**
- **Termik ayrışma / kaçınılması gereken şartlar:** Usulüne uygun şekilde kullanıldığında ayrışma olmaz.
- **10.3 Zararlı reaksiyon olasılığı** Tehlikeli reaksiyonları duyulmamıştır.
- **10.4 Kaçınılması gereken durumlar** Daha başka önemli bilgi mevcut değildir.
- **10.5 Uyumsuz malzemeler** Daha başka önemli bilgi mevcut değildir.
- **10.6 Zararlı bozunma ürünleri** Ayrışmada oluşan tehlikeli ürünler duyulmamıştır.

Bölüm 11: Toksikolojik bilgiler**11.1 Toksikolojik etkiler hakkında bilgi**

- **Akut toksisite**
Yutulması halinde zararlıdır.

Sınıflandırma için önemli olan LD/LC50 - değerleri (toksikolojik deney değerleri)

Ağızdan	LD50	2.000 mg/kg (rat)
---------	------	-------------------

- **Asli tahriş edici etkisi:**
- **Cilt aşınması/tahrişi**
Ciddi cilt yanıklarına ve göz hasarına yol açar.
- **Ciddi göz hasarları/tahrişi**
Ciddi göz hasarına yol açar.
- **Solunum yolları veya cilt hassaslaşması** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Aşağıdaki grupların potansiyel etkilerine dair bilgiler:**
- **CMR-etkileri (kansere üretici, irsiyet değiştirici ve üremeyi tehdit edici etki)**
- **Eşey hücre mutajenitesi** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Kanserojenite** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Üreme sistemi toksisitesi** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **BHOT - tek maruz kalma** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **BHOT - tekrarlı maruz kalma** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.
- **Aspirasyon zararı** Mevcut bilgilere göre, sınıflandırma kriterlerini karşılamamaktadır.

TR
(Devamı sayfa 6 'da)

Güvenlik bilgi formu
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(Sayfa 5 'nin devamı)


Bölüm 12: Ekolojik bilgiler

- **12.1 Toksikite**
- **Su toksisitesi:** Daha başka önemli bilgi mevcut değildir.
- **12.2 Kalıcılık ve bozunabilirlik** Daha başka önemli bilgi mevcut değildir.
- **12.3 Biyobirikim potansiyeli** Daha başka önemli bilgi mevcut değildir.
- **12.4 Toprakta hareketlilik** Daha başka önemli bilgi mevcut değildir.
- **Diğer ekolojik uyarılar:**
- **Genel uyarılar:**
 Suyu tehdit sınıfı 1 (): suyu hafif tehdit edicidir
 Sulandırılmamış vaziyette ya da büyük miktarlarda yeraltı suyuna, duran ve akan sulara ve kanalizasyona ulaşmasını " önleyiniz.
 Sulandırılmamış ya da nőtürlenmemiş olarak atık sulara ya da ön sulandırma havuzuna ulaşmamalıdır.
- **12.5 PBT ve vPvB değerlendirmesinin sonuçları**
- **PBT:** Uygulanamaz.
- **vPvB:** Uygulanamaz.
- **12.6 Diğer olumsuz etkiler** Daha başka önemli bilgi mevcut değildir.

Bölüm 13: Bertaraf etme bilgileri

- **13.1 Atık işleme yöntemleri**
- **Tavsiye:** Ev çöpüyle beraber tasfiye edilmesi yasaktır. Kanalizasyona ulaşmasını önleyiniz.
- **Temizlenmemiş ambalajlar:**
- **Tavsiye:** Tasfiyesi resmi makamların yönetmeliklerine göre yapılır.
- **Tavsiye olunan temizlik maddesi:** Su, gerekirse temizlik maddeleri katmak suretiyle.

Bölüm 14: Taşımacılık bilgisi

- | | |
|---|--|
| · 14.1 UN Numarası
· ADR, IMDG, IATA | UN1823 |
| · 14.2 UN uygun taşımacılık ismi
· ADR
· IMDG, IATA | 1823 SODYUM HİDROKSİT, KATI
SODIUM HYDROXIDE, SOLID |
| · 14.3 Taşımacılık zararları
· ADR, IMDG, IATA | |
|  | |
| · sınıfı
· Tehlike pusulası | 8 Aşındırıcı maddeler
8 |
| · 14.4 Ambalaj grubu
· ADR, IMDG, IATA | II |
| · 14.5 Çevresel zararlar | Uygulanamaz. |
| · 14.6 Kullanıcılar için özel önlemler | Uyarı: Aşındırıcı maddeler |

(Devamı sayfa 7 'da)

Güvenlik bilgi formu
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(Sayfa 6'nın devamı)

· Tehlike Tanım No. (Kemler (tehlike) sayısı):	80
· EMS - numarası:	8-06
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 MARPOL 73/78 EK II ve IBC Koduna göre Toplu Taşımacılık	Uygulanamaz.
· Nakliyat/diğer bilgiler:	
· ADR	
· Sınırlı Miktarlar	1 kg
· İstisnai miktarlar (EQ)	Kod: E2 İç ambalaj başına maksimum net miktar: 30 g Dış ambalaj başına maksimum net miktar: 500 g
· Taşıma kategorisi	2
· Tünel kısıtlama kodu	E
· IMDG	
· Limited quantities (LQ)	1 kg
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Düzenleme":	UN 1823 SODYUM HİDROKSİT, KATI, 8, II

Bölüm 15: Mevzuat bilgisi

- **15.1 Madde veya karışım için güvenlik, sağlık ve çevresel düzenlemeler/mevzuat**
- **2012/18/EU sayılı Direktifi**
- **Adlandırılmış tehlikeli maddeler - EK-1 Madde içinde bulunmamaktadır**
- **Elektrikli ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlanmasına Dair Yönetmelik (2011/65/EU) - Ek-2**
Madde içinde bulunmamaktadır
- **Yönetmelik (EC) No 273/2004 Madde içinde bulunmamaktadır**
- **Yönetmelik (EC) No 111/2005 Madde içinde bulunmamaktadır**
- **15.2 Kimyasal güvenlik değerlendirmesi: Bir Kimyasal güvenlik değerlendirmesi yapılmamıştır.**

Bölüm 16: Diğer bilgiler

Veriler bugünkü bilgi durumumuza istinat etmektedir, ancak ürün özellikleri ile ilgili teminat teşkil etmezler ve akdî bir hukuki ilişki tesis etmezler.

Kısaltmalar ve:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Devamı sayfa 8'da)

Güvenlik bilgi formu
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(Sayfa 7 'nin devamı)

PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Metaller için aşındırıcı – Kategori 1
Acute Tox. 4: Akut toksisite – Kategori 4
Skin Corr. 1A: Cilt aşınması/tahrişi – Kategori 1A
Eye Dam. 1: Ciddi göz hasarı/göz tahrişi – Kategori 1

TR

Phiếu an toàn hóa chất

theo điều Luật hóa chất số: 06/2007/QH12, Điều 29

Ngày in 2022.03.16

Sửa lại: 2022.03.16

Phần 1: Nhận dạng hóa chất và thông tin về nhà cung cấp

- Phân loại sản phẩm
- Tên thương mại **Natri hydroxit**
- Mã giao dịch: 21160, 21160-sp, 21162
- Mã CAS: 1310-73-2
- Số EC: 215-185-5
- Mã hiển thị: 011-002-00-6
- Mục đích sử dụng và hạn chế khi sử dụng: Không có thêm thông tin có liên quan.
- Hướng dẫn sử dụng Phòng thí nghiệm hóa chất
- Thông tin chi tiết của các nhà cung cấp các bảng dữ liệu an toàn
- Nhà sản xuất / Nhà phân phối:
Electron Microscopy Sciences
1560 Industry Road
USA-Hatfield, PA 19440
Tel: 215-412-8400 Fax: 215-412-8450
email: info@emsdiasum.com
www.emsdiasum.com
- Các thông tin chi tiết có thể tìm thấy ở: Product safety department
- Số điện thoại liên hệ trong trường hợp khẩn cấp
ChemTrec 1-800-424-9300 Contract CCN7661
1-703-527-3887

Phần 2: Nhận dạng đặc tính nguy hiểm của hóa chất

- Phân loại chất và hỗn hợp



Ăn mòn

Ăn mòn kim loại – Cấp 1

H290 Có thể ăn mòn kim loại.

Ăn mòn/kích ứng da – Cấp 1A

H314 Gây bỏng da nghiêm trọng và hỏng mắt

Tổn thương nghiêm trọng/ kích ứng mắt – Cấp 1

H318 Gây tổn thương mắt nghiêm trọng



Độc cấp tính – Miệng – Cấp 4

H302 Có hại nếu nuốt phải

Nguy hại cấp tính đối với môi trường thủy sinh – Cấp 3

H402 Có hại đối với sinh vật thủy sinh

- Các phân tử nhãn hiệu
- Các yếu tố trên nhãn GHS Chất này được xếp loại và ghi nhãn theo quy định của GHS
- Các hình biểu thị sự nguy hiểm



GHS05



GHS07

- Từ cảnh báo Nguy hiểm

(Xem tiếp ở trang 2)

Phiếu an toàn hóa chất

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Tên thương mại Natri hydroxit

(Xem tiếp ở trang 1)

- **Các hướng dẫn về các nguy hiểm**
Có thể ăn mòn kim loại.
Có hại nếu nuốt phải
Gây bỏng da nghiêm trọng và hồng mắt
Có hại đối với sinh vật thủy sinh
- **Các hướng dẫn an toàn**
Nếu tiếp xúc trên da (hoặc tóc): ngay lập tức cởi bỏ tất cả quần áo nhiễm độc. Rửa bằng nước/ vòi hoa sen
NẾU DÍNH MẮT: Rửa thật cẩn thận với nước trong vài phút. Tháo kính áp tròng nếu có và nếu dễ làm.
Sau đó tiếp tục rửa
Gọi ngay trung tâm giải độc/ bác sĩ
Việc chữa trị cụ thể (xem trên nhãn mác).
Nơi cất giữ được khóa lại
Vứt sản phẩm/vỏ hộp theo quy định của địa phương/khu vực/quốc gia/quốc tế.
- **Các dấu hiệu nguy hiểm khác:**
- **Kết quả của đánh giá PBT và vPvB Results**
- **PBT:** Không được áp dụng
- **vPvB:** Không được áp dụng

Phần 3: Thông tin về thành phần các chất

- **Đơn chất**
- **Mô tả mã CAS**
1310-73-2 Natri hydroxit
- **Mã nhận biết**
- **Số EC:** 215-185-5
- **Mã hiện thị :** 011-002-00-6

Phần 4: Biện pháp sơ cứu về y tế

- **Mô tả về các biện pháp sơ cứu**
- **Hướng dẫn chung:** Ngay lập tức loại bỏ quần áo bị vấy bẩn bởi sản phẩm
- **Sau khi hít vào:**
Trong trường hợp người bệnh bất tỉnh giữ bệnh nhân ở vị trí nằm nghiêng và chuyển đi.
- **Sau khi tiếp xúc với da:** Rửa ngay và thật sạch với nước và xà phòng
- **Sau khi tiếp xúc với mắt:** Nhẹ nhàng rửa mắt trong vài phút dưới vòi nước, sau đó xin tư vấn bác sĩ
- **Sau khi nuốt phải:** Uống nhiều nước và hít thở không khí trong lành. Gọi ngay cho bác sĩ
- **Thông tin dành cho bác sĩ:**
- **Những triệu chứng và tác dụng cấp và chậm quan trọng nhất:**
Không có thông tin liên quan nào khác
- **Các chỉ dẫn về sự giúp đỡ tức thời của bác sĩ và trợ giúp đặc biệt**
Không có thêm thông tin liên quan

Phần 5: Biện pháp xử lý khi có hỏa hoạn

- **Các phương tiện chữa cháy**
- **Các giải pháp chữa cháy thích hợp**
Use Sử dụng phương pháp chữa cháy phù hợp với điều kiện môi trường xung quanh
- **Những nguy cơ gây cháy từ các chất hoặc hỗn hợp** Không có thêm thông tin liên quan

(Xem tiếp ở trang 3)

Phiếu an toàn hóa chất

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Tên thương mại Natri hydroxit

(Xem tiếp ở trang 2)

- **Hướng dẫn trong trường hợp chữa cháy**
- **Các thiết bị bảo vệ** Không cần đến những biện pháp đặc biệt

Phần 6: Biện pháp phòng ngừa, ứng phó khi có sự cố

- **Trang thiết bị bảo hộ và quy trình ứng phó sự cố**
Đeo thiết bị bảo vệ. Những ai không có thiết bị bảo vệ không được vào khu vực nguy hiểm
- **Các cảnh báo về môi trường**
Ngăn không cho tràn vào hệ thống nước thải, nước mặt hay nước ngầm
- **Biện pháp, vật liệu vệ sinh sau khi xảy ra sự cố**
Sử dụng chất trung hòa.
Loại bỏ vật liệu bị ô nhiễm theo quy định về chất thải tại mục 13
Đảm bảo thoáng khí
- **Liên hệ đến các phần khác**
Xem phần 7 để biết thông tin về xử lý an toàn
Xem phần 8 để biết thông tin và thiết bị bảo hộ cá nhân
Xem phần 13 để biết thông tin về xử thải

Phần 7: Yêu cầu về sử dụng, bảo quản

- **Xử lý**
- **Các biện pháp bảo vệ để xử lý an toàn** Loại bỏ hoàn toàn bụi
- **Thông tin về các biện pháp chống cháy**, Không có yêu cầu về biện pháp đặc biệt
- **Điều kiện cho việc lưu trữ an toàn, bao gồm cả sự không tương thích**
- **Lưu trữ:**
- **Yêu cầu đối với phòng chứa và dụng cụ chứa** Không có yêu cầu đặc biệt nào
- **Thông tin về lưu trữ đối với một cơ sở lưu trữ thông thường** Không yêu cầu
- **Thông tin thêm về điều kiện lưu trữ** Đậy kín bình chứa
- **Tác dụng của sản phẩm** Không có thêm thông tin liên quan

Phần 8: Kiểm soát phơi nhiễm/yêu cầu về thiết bị bảo vệ cá nhân

- **Thông tin thêm về thiết kế các phương tiện kỹ thuật** Không có thêm dữ liệu; xem mục 7
- **Các thông số kiểm soát**

- **Các thành phần với giá trị giới hạn cần được yêu cầu giám sát tại nơi làm việc**

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PEL (US)	Giới hạn tiếp xúc ca làm việc: 2 mg/m ³
REL (US)	Ceiling limit value: 2 mg/m ³
TLV (US)	Ceiling limit value: 2 mg/m ³

- **Thông tin bổ sung** Danh sách có hiệu lực trong suốt quá trình thực hiện được sử dụng làm cơ sở
- **Kiểm soát các tình huống nguy hiểm**
- **Các thiết bị an toàn cá nhân**
- **Các biện pháp bảo vệ và vệ sinh tổng thể**
Tránh xa thực phẩm, đồ uống và đồ ăn cho vật nuôi
Loại bỏ ngay tập tức tất cả quần áo bị nhiễm bẩn
rửa tay trước giờ nghỉ và cuối giờ làm
Tránh tiếp xúc với mắt và da
- **Bảo vệ đường hô hấp:** Không yêu cầu

(Xem tiếp ở trang 4)

Phiếu an toàn hóa chất

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Tên thương mại Natri hydroxit

(Xem tiếp ở trang 3)

· Bảo vệ tay



Găng tay bảo hộ

Chất liệu làm găng phải chống thấm đối với sản phẩm/chất/chế phẩm
Do không thấy các cuộc thử nghiệm nên không có khuyến cáo về chất liệu làm găng tay cho sản phẩm/ chế phẩm/hỗn hợp hóa chất
Chọn chất liệu găng theo số lần và thời gian sử dụng

· Chất liệu của găng tay

Việc lựa chọn găng tay phù hợp không chỉ phụ thuộc vào chất liệu, mà còn về nhãn hiệu hơn và chất lượng và rất đa dạng về nhà sản xuất

· Thời gian xâm nhập của găng tay vật liệu

Việc phá vỡ chính xác qua thời gian đã được phát hiện bởi các nhà sản xuất găng tay bảo vệ và phải được giám sát

· Bảo vệ mắt Eye



Kính bảo hộ dán kín

Phần 9: Đặc tính lý, hóa của hóa chất

· Thông tin về tính chất vật lý và hóa học cơ bản

· Thông tin tổng quát

· Diện mạo:

Hình thức::

Viên

Màu sắc

Trắng

· Mùi:

Không mùi

· Ngưỡng mùi:

Không xác định.

· Độ pH

Không thể áp dụng.

· Thay đổi trong điều kiện

Điểm tan / Phạm vi tan

323 °C

Điểm sôi / Phạm vi sôi

1,388 °C

· Điểm cháy

Không thể áp dụng.

· Tính dễ cháy (rắn, khí):

Sản phẩm không cháy.

· Nhiệt độ phân hủy:

Không xác định.

· Nhiệt độ tự cháy

Không xác định.

· Nguy hiểm do cháy nổ:

Sản phẩm không có nguy cơ cháy nổ

· Giới hạn nổ:

Dưới:

Không xác định

Trên:

Không xác định.

· Áp suất hóa hơi tại 800 °C

3.5 hPa

· Mật độ tại 20 °C:

2.13 g/cm³

· Mật độ tương đối:

Không xác định.

· Mật độ của hơi:

Không thể áp dụng.

(Xem tiếp ở trang 5)

Phiếu an toàn hóa chất

theo điều Luật hóa chất số: 06/2007/QH12, Điều 29

Ngày in 2022.03.16

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Tên thương mại Natri hydroxit

(Xem tiếp ở trang 4)

· Tỷ lệ hóa hơi	Không thể áp dụng.
· Độ hòa tan trong / Độ hòa trộn với: Nước tại 20 °C:	420 g/l
· Sự phân biệt hệ số (n-octanol / Nước):	Không xác định.
· Độ nhớt: Động Tĩnh	Không thể áp dụng. Không thể áp dụng.
· Thông tin khác:	Không có thông tin chi tiết tương ứng

Phần 10: Mức ổn định và phản ứng của hóa chất

- Khả năng phản ứng Không có thêm thông tin liên quan
- Tính ổn định
- Phân hủy nhiệt / Điều kiện cần tránh:: Không phân hủy nếu được sử dụng theo tiêu chuẩn.
- Khả năng phản ứng nguy hiểm: Chưa có phản ứng nguy hiểm nào được biết tới.
- Các điều kiện cần tránh: Không có thêm thông tin liên quan
- Vật liệu không tương thích Không có thêm thông tin liên quan.
- Sản phẩm phân hủy nguy hiểm: Chưa có sản phẩm phân hủy nào được biết đến.

Phần 11: Thông tin về độc tính

- Thông tin về các hiệu ứng độc tính:
- Ngộ độc cấp tính:

· Phân loại liên quan tới giá trị LD/LC50

Miệng	LD50	2,000 mg/kg (rat)
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- Hiệu ứng kích thích sơ cấp:
- Trên da Tác dụng ăn mòn da và lớp màng nhầy niêm mạc mạnh
- Trên mắt: Tác dụng ăn mòn mạnh.
- Độ nhạy cảm Không có tác dụng mẫn cảm nào được biết tới.
- Thông tin thêm về độc tính::
Nuốt phải sẽ dẫn đến bị ăn mòn da mạnh ở miệng và họng đồng thời dẫn đến nguy cơ thủng thực quản và dạ dày.

Phần 12: Thông tin về sinh thái

- Độc tính
- Thủy sản độc tính: Không có thêm thông tin liên quan.
- Sự kiên trì và khả năng nhậ dần: Không có thêm thông tin liên quan.
- Hành vi trong các hệ thống môi trường:
- Khả năng tích lũy sinh học Không có thêm thông tin liên quan.
- Độ linh động trong đất Không có thêm thông tin liên quan.
- Bổ sung thông tin sinh thái:
- Ghi chú tổng quát:
Độc hại cho nước loại 1 (quy định của Đức) (Đánh giá theo danh sách): hơi độc cho nước.
Không để sản phẩm chưa pha loãng hoặc số lượng lớn tiếp xúc với nước ngầm, nguồn nước hoặc hệ thống nước thải.

(Xem tiếp ở trang 6)

Phiếu an toàn hóa chất
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(Xem tiếp ở trang 5)


Không được bỏ vào hệ thống nước thải hoặc hệ thống thoát nước mà chưa pha loãng hoặc chưa trung hòa.

- **Kết quả của đánh giá PBT và vPvB**
- **PBT PBT:** Không có khả năng ứng dụng.
- **vPvB vPvB:** Không có khả năng ứng dụng.
- **Các hiệu ứng bất lợi** Không có thêm thông tin liên quan.

Phần 13: Thông tin về thải bỏ

- **Phương pháp xử lý chất thải**
- **Khuyến nghị**
Không được xử lý cùng rác thải sinh hoạt. Không được bỏ sản phẩm vào hệ thống nước thải.
- **Bao bì bán**
- **Khuyến nghị:** Việc xử lý phải thực hiện theo các quy định của chính quyền.
- **Các chất tẩy rửa được khuyến nghị sử dụng** Nước, nếu cần, kết hợp với chất tẩy rửa.

Phần 14: Thông tin khi vận chuyển

- **Mã LHQ (UN)**
- **ADR, IMDG, IATA** UN1823
- **Tên vận chuyển theo quy ước của LHQ**
- **ADR** 1823 SODIUM HYDROXIDE, SOLID
- **IMDG, IATA** SODIUM HYDROXIDE, SOLID
- **vận chuyển các lớp học nguy hiểm**
- **ADR, IMDG, IATA**
- 
- **lớp** 8 Chất ăn mòn.
- **nhãn** 8
- **Nhóm bao bì**
- **ADR, IMDG, IATA** II
- **Các môi trường nguy hiểm:** Không có khả năng ứng dụng.
- **Các biện pháp phòng ngừa đặc biệt cho người sử dụng:** Cảnh báo: Chất ăn mòn.
- **Mã nguy hiểm:** 80
- **Mã EMS:** 8-06
- **Các nhóm phân tách** Alkalis
- **Stowage Category** A
- **Segregation Code** SG35 Stow "separated from" SGG1-acids
- **Vận chuyển với số lượng lớn theo Phụ Lục II của MARPOL73/78 và mã IBC** Không có khả năng ứng dụng.

(Xem tiếp ở trang 7)

Phiếu an toàn hóa chất
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(Xem tiếp ở trang 6)

· Vận chuyển/ Thông tin thêm:

· ADR

· Số lượng giới hạn (LQ)

1 kg

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· Danh mục vận chuyển

2

· Mã hạn chết đường hầm

E

· IMDG

· Limited quantities (LQ)

1 kg

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· Mẫu chuẩn của LHQ:

UN 1823 SODIUM HYDROXIDE, SOLID, 8, II

Phần 15: Thông tin về pháp luật

· An toàn, sức khỏe và các quy định, pháp luật về môi trường cho các chất và hỗn hợp

Không có thêm thông tin liên quan

· Kho hóa chất và chất hóa học của Philippin Chất được liệt kê.

· Lập kế hoạch cho thuốc và chất độc theo mẫu chuẩn S5, S6, S10

· Danh mục hóa chất sản xuất, kinh doanh có điều kiện trong lĩnh vực công nghiệp - phụ lục I

Chất được liệt kê.

· Danh mục hóa chất hạn chế sản xuất, kinh doanh trong lĩnh vực công nghiệp - phụ lục II

Chất không được liệt kê.

· Danh mục hóa chất nguy hiểm phải xây dựng kế hoạch phòng ngừa, ứng phó sự cố hóa chất - phụ lục IV - Ngưỡng khối lượng hóa chất tồn trữ lớn nhất tại một thời điểm (kg)

Chất không được liệt kê.

· Danh mục hóa chất phải khai báo - phụ lục V Chất được liệt kê.

· Các yêu tố trên nhãn GHS Chất này được xếp loại và ghi nhãn theo quy định của GHS

· Các hình biểu thị sự nguy hiểm



GHS05 GHS07

· Từ cảnh báo Nguy hiểm

· Các hướng dẫn về các nguy hiểm

Có thể ăn mòn kim loại.

Có hại nếu nuốt phải

Gây bỏng da nghiêm trọng và hỏng mắt

Có hại đối với sinh vật thủy sinh

· Các hướng dẫn an toàn

Nếu tiếp xúc trên da (hoặc tóc): ngay lập tức cởi bỏ tất cả quần áo nhiễm độc. Rửa bằng nước/ vòi hoa sen

NẾU DÍNH MẮT: Rửa thật cẩn thận với nước trong vài phút. Tháo kính áp tròng nếu có và nếu dễ làm.

Sau đó tiếp tục rửa

Gọi ngay trung tâm giải độc/ bác sĩ

Việc chữa trị cụ thể (xem trên nhãn mác).

(Xem tiếp ở trang 8)

Phiếu an toàn hóa chất
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Sửa lại: 2022.03.16

Tên thương mại Natri hydroxit

Nơi cất giữ được khóa lại

Vứt sản phẩm/vỏ hộp theo quy định của địa phương/khu vực/quốc gia/quốc tế.

· **Đánh giá an toàn hóa chất:** Đánh giá an toàn hóa chất chưa được tiến hành.

(Xem tiếp ở trang 7)

Phần 16: Các thông tin cần thiết khác

Thông tin này dựa trên kiến thức hiện nay của chúng tôi. Tuy nhiên, điều này không đảm bảo cho bất cứ tính chất cụ thể nào của sản phẩm và không thiết lập mối quan hệ hợp tác có giá trị pháp lý nào.

· **Liên hệ:**

· **Ngày tháng biên soạn phiếu:** 2022.03.16

· **Ngày tháng sửa đổi, bổ sung gần nhất:** 2022.03.16

· **Chữ viết tắt hoặc Viết tắt chữ cái đầu:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Ăn mòn kim loại – Cấp 1: Corrosive to metals – Category 1

Độc cấp tính – Miệng – Cấp 4: Acute toxicity – Category 4

Ăn mòn/kích ứng da – Cấp 1A: Skin corrosion/irritation – Category 1A

Tổn thương nghiêm trọng/ kích ứng mắt – Cấp 1: Serious eye damage/eye irritation – Category 1

Nguy hại cấp tính đối với môi trường thủy sinh – Cấp 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3