

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

## 1 Identification

- **Product identifier**
- **Trade name:** ETC BOND 556 ACTIVATOR (PART A)
- **Article number:** 50380-556A
- **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

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



GHS05 GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
3,6,9-triazaundecamethylenediamine  
3,6-diazaoctanethylenediamin
- **Hazard statements**  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Do not breathe dusts or mists.  
Wash thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 1)

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

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).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

68410-23-1	Versamid 140 Polyamide Resin	>10-≤25%
112-24-3	3,6-diazaoctanethylenediamin	>2.5-≤10%
112-57-2	3,6,9-triazaundecamethylenediamine	>2.5-≤10%

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 2)

- **After swallowing:**  
Immediately call a doctor.  
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:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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:**

7440-22-4	silver	0.3 mg/m <sup>3</sup>
68410-23-1	Versamid 140 Polyamide Resin	30 mg/m <sup>3</sup>
112-24-3	3,6-diazaoctanethylenediamin	3 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	15 mg/m <sup>3</sup>

· **PAC-2:**

7440-22-4	silver	170 mg/m <sup>3</sup>
68410-23-1	Versamid 140 Polyamide Resin	330 mg/m <sup>3</sup>
112-24-3	3,6-diazaoctanethylenediamin	14 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	130 mg/m <sup>3</sup>

· **PAC-3:**

7440-22-4	silver	990 mg/m <sup>3</sup>
68410-23-1	Versamid 140 Polyamide Resin	2,000 mg/m <sup>3</sup>

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 3)

112-24-3	3,6-diazaoctanethylenediamin	83 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	790 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

<b>112-24-3 3,6-diazaoctanethylenediamin</b>	
WEEL	Long-term value: 6 mg/m <sup>3</sup> , 1 ppm Skin
<b>112-57-2 3,6,9-triazaundecamethylenediamine</b>	
WEEL	Long-term value: 5 mg/m <sup>3</sup> Skin; DSEN

- **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.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

(Contd. on page 5)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 4)

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:**

<b>Form:</b>	Pasty
<b>Color:</b>	Silver grey
<b>Odor:</b>	Amine-like
<b>Odor threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	333 °C (631.4 °F)

· **Flash point:** 163 °C (325.4 °F)

· **Flammability (solid, gaseous):** Not flammable.

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

· **Vapor pressure:** Not determined.

· **Density:** Not determined.

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 5)

- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - VOC content:** 0.00 %  
0.0 g/l / 0.00 lb/gal
- **Solids content:** 0.0 %
- **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:**

### 112-24-3 3,6-diazaoctanethylenediamin

Oral	LD50	2,500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

### 112-57-2 3,6,9-triazaundecamethylenediamine

Dermal	LD50	660 mg/kg (rabbit)
--------	------	--------------------

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**
  - Strong caustic effect.
  - Strong irritant with the danger of severe eye injury.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
  - The product shows the following dangers according to internally approved calculation methods for preparations:
  - Harmful
  - Corrosive
  - Irritant
  - 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)**
  - None of the ingredients is listed.

(Contd. on page 7)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 6)

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is 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.

· **Ecotoxicological effects:**

· **Remark:** Harmful to fish

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

· **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.

## 14 Transport information

· **UN-Number**

· **DOT, ADR, IMDG, IATA**

UN1760

· **UN proper shipping name**

· **DOT**

Corrosive liquids, n.o.s. (Triethylenetetramine, Tetraethylenepentamine)

· **ADR**

1760 CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)

· **IMDG, IATA**

CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 7)

· **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:** F-A,S-B· **Segregation groups** Alkalis· **Stowage Category** B· **Stowage Code** SW2 Clear of living quarters.

· **Transport in bulk according to Annex II of  
 MARPOL73/78 and the IBC Code** Not applicable.

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

· **Quantity limitations** On passenger aircraft/rail: 1 L  
 On cargo aircraft only: 30 L

· **ADR**

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

· **IMDG**

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

· **UN "Model Regulation":**

UN 1760 CORROSIVE LIQUID, N.O.S.  
 (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE),  
 8, II

US

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 8)

## 15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

7440-22-4 silver

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

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7440-22-4 silver

D

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

· **Hazard pictograms**



GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labeling:**

3,6,9-triazaundecamethylenediamine

3,6-diazaoctanethylenediamin

· **Hazard statements**

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

· **Precautionary statements**

Do not breathe dusts or mists.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

(Contd. on page 10)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 9)

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

*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).*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*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.*

· **Date of preparation / last revision** 08/21/2020 / -

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport 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*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

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

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*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***

***Skin Corr. 1B: Skin corrosion/irritation – Category 1B***

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

***Skin Sens. 1: Skin sensitisation – Category 1***

# Safety Data Sheet

## according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

### 1 Identification

- **Product identifier**
- **Trade name:** ETC BOND 556 ACTIVATOR (PART A)
- **Article number:** 50380-556A
- **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](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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](http://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](http://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

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

(Contd. on page 2)

# Safety Data Sheet

## according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 1)

## · Hazard pictograms



GHS05 GHS07

· Signal word *Danger*

## · Hazard-determining components of labelling:

3,6,9-triazaundecamethylenediamine

3,6-diazaoctanethylenediamin

## · Hazard statements

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

## · Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

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

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).

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

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 and Information on Ingredients

· Chemical characterisation: *Mixtures*

· Description: Mixture of substances listed below with nonhazardous additions.

## · Dangerous components:

68410-23-1	Versamid 140 Polyamide Resin	>10-≤25%
112-24-3	3,6-diazaoctanethylenediamin	>2.5-≤10%
112-57-2	3,6,9-triazaundecamethylenediamine	>2.5-≤10%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

-AU-

(Contd. on page 3)

# Safety Data Sheet

## according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 2)

### 4 First Aid Measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air and to be sure call for a doctor.  
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:**  
Call for a doctor immediately.  
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:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.

(Contd. on page 4)

## Safety Data Sheet according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 3)

- **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 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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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.

(Contd. on page 5)

-AU

# Safety Data Sheet

according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 4)

· Eye protection:



Tightly sealed goggles

## 9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Pasty
· Colour:	Silver grey
· Odour:	Amine-like
· Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	333 °C

· Flash point: 163 °C

· Flammability (solid, gas): Not applicable.

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

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

· Explosion limits:

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

· Vapour pressure: Not determined.

· Density: Not determined.

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

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

· Viscosity:

· Dynamic:	Not determined.
· Kinematic:	Not determined.

· Solvent content:

VOC (EC) 0.00 %

Solids content: 0.0 %

· Other information: No further relevant information available.

AU

(Contd. on page 6)

# Safety Data Sheet

## according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 5)

### 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:**

#### 112-24-3 3,6-diazaoctanethylenediamin

Oral	LD50	2,500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

#### 112-57-2 3,6,9-triazaundecamethylenediamine

Dermal	LD50	660 mg/kg (rabbit)
--------	------	--------------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** Sensitisation possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Corrosive  
Irritant  
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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.

(Contd. on page 7)



## Safety Data Sheet according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**


(Contd. of page 6)

- Danger to drinking water if even small quantities leak into the ground.*  
*Harmful to aquatic organisms*
- **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.

### 14 Transport information

· <b>UN-Number</b> · <b>ADG, IMDG, IATA</b>	UNI760
· <b>UN proper shipping name</b> · <b>ADG</b>  · <b>IMDG, IATA</b>	1760 CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)  CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)
· <b>Transport hazard class(es)</b> · <b>ADG, IMDG, IATA</b>	
	
· <b>Class</b> · <b>Label</b>	8 Corrosive substances. 8
· <b>Packing group</b> · <b>ADG, IMDG, IATA</b>	II
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> · <b>EMS Number:</b> · <b>Segregation groups</b> · <b>Stowage Category</b> · <b>Stowage Code</b>	Warning: Corrosive substances. 80 F-A,S-B Alkalis B SW2 Clear of living quarters.
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.

(Contd. on page 8)

AU

# Safety Data Sheet

according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 7)

**· Transport/Additional information:**

**· ADG**

- Limited quantities (LQ)
- Excepted quantities (EQ)

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

- Transport category
- Tunnel restriction code

2

E

**· IMDG**

- Limited quantities (LQ)
- Excepted quantities (EQ)

1L

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**· UN "Model Regulation":**

UN 1760 CORROSIVE LIQUID, N.O.S.  
(TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE), 8, II

## 15 Regulatory information

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

**· Australian Inventory of Chemical Substances**

All ingredients are listed.

**· Standard for the Uniform Scheduling of Medicines and Poisons**

7440-22-4 silver

S2

**· Australia: Priority Existing Chemicals**

None of the ingredients is listed.

**· GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

**· Hazard pictograms**



GHS05 GHS07

**· Signal word** Danger

**· Hazard-determining components of labelling:**

3,6,9-triazaundecamethylenediamine

3,6-diazaoctanethylenediamin

**· Hazard statements**

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

**· Precautionary statements**

Do not breathe dusts or mists.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

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

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.

(Contd. on page 9)

## Safety Data Sheet according to WHS Regulations

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 8)

*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).*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*Store locked up.*

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

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is 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.*

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport 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*

*ELINCS: European List of Notified Chemical Substances*

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

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*

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

*Skin Sens. 1: Skin sensitisation – Category 1*

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

### 1 Identification

- **Product identifier**
- **Trade name:** ETC BOND 556 ACTIVATOR (PART A)
- **Article number:** 50380-556A
- **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

Skin Corrosion - Category 1B      H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1      H318 Causes serious eye damage.



GHS07

Skin Sensitizer - Category 1      H317 May cause an allergic skin reaction.

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



GHS05    GHS07

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
3,6,9-triazaundecamethylenediamine  
3,6-diazaoctanethylenediamin
- **Hazard statements**  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.
- **Precautionary statements**  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace.

(Contd. on page 2)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 1)

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

**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).

Take off contaminated clothing and wash it before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

68410-23-1	Versamid 140 Polyamide Resin	10-30% w/w *
112-24-3	3,6-diazaoctanethylenediamin	5-10% w/w *
112-57-2	3,6,9-triazaundecamethylenediamine	5-10% w/w *

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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:**

Immediately call a doctor.

(Contd. on page 3)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 2)

- 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:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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.

(Contd. on page 4)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 3)

- **Control parameters**

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

**112-24-3 3,6-diazaoctanethylenediamin**

EV	TWA: 3 mg/m <sup>3</sup> , 0.5 ppm
	Skin

- **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.

Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **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:** Pasty

**Color:** Silver grey

- **Odor:** Amine-like

- **Odor threshold:** Not determined.

(Contd. on page 5)

## Safety Data Sheet

according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 4)

· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	333 °C
· <b>Flash point:</b>	163 °C
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Solids content:</b>	0.0 %
· <b>Other information</b>	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.

CA  
(Contd. on page 6)



# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 5)

### 11 Toxicological information

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

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

#### 112-24-3 3,6-diazaoctanethylenediamin

Oral	LD50	2,500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

#### 112-57-2 3,6,9-triazaundecamethylenediamine

Dermal	LD50	660 mg/kg (rabbit)
--------	------	--------------------

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

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- **Sensitization:** Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

Irritant

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)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is 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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**
- Water hazard class 2 (Self-assessment): hazardous for water
- Do not allow product to reach ground water, water course or sewage system.
- Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- Danger to drinking water if even small quantities leak into the ground.
- Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 7)

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)



(Contd. of page 6)

· **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.

### 14 Transport information

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT/TDG, ADR, IMDG, IATA</b></li> </ul>  | <p>UNI760</p>  |
| <ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT/TDG</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>  | <p>Corrosive liquids, n.o.s. (Triethylenetetramine, Tetraethylenepentamine)</p> <p>1760 CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)</p> <p>CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)</p> |
| <ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT/TDG (Transport dangerous goods):</b></li> </ul>   | <div style="text-align: center;">  </div>   |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>   | <p>8 Corrosive substances</p> <p>8</p>   |
| <ul style="list-style-type: none"> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <div style="text-align: center;">  </div>   |
| <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>   | <p>8 Corrosive substances</p> <p>8</p>   |
| <ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT/TDG, ADR, IMDG, IATA</b></li> </ul>  | <p>II</p>  |
| <ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> </ul>  | <p>Not applicable.</p>   |
| <ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Hazard identification number (Kemler code):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Segregation groups</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Stowage Code</b></li> </ul> | <p>Warning: Corrosive substances</p> <p>80</p> <p>F-A,S-B</p> <p>Alkalis</p> <p>B</p> <p>SW2 Clear of living quarters.</p>   |

(Contd. on page 8)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 7)

· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT/TDG</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1760 CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE), 8, II

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

#### · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

#### · Section 313 (Specific toxic chemical listings):

7440-22-4 silver

#### · TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

#### · Canadian substance listings:

##### · Canadian Domestic Substances List (DSL)

All ingredients are listed.

##### · Canadian Ingredient Disclosure list (limit 0.1%)

112-24-3 3,6-diazaoctanethylenediamin

##### · Canadian Ingredient Disclosure list (limit 1%)

7440-22-4 silver

112-57-2 3,6,9-triazaundecamethylenediamine

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

- **Hazard pictograms**



GHS05

GHS07

(Contd. on page 9)

CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 08/21/2020

Reviewed on 08/21/2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 8)

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

3,6,9-triazaundecamethylenediamine

3,6-diazaoctanethylenediamin

· **Hazard statements**

*Causes severe skin burns and eye damage.*

*May cause an allergic skin reaction.*

· **Precautionary statements**

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

*Wash thoroughly after handling.*

*Contaminated work clothing should not be allowed out of the workplace.*

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

*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).*

*Take off contaminated clothing and wash it before reuse.*

*If skin irritation or rash occurs: Get medical advice/attention.*

*Wash contaminated clothing before reuse.*

*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.*

· **Date of the latest revision of the safety data sheet** 08/21/2020 / -

· **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*

*ELINCS: European List of Notified 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 21.08.2020

Revision: 21.08.2020

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

- **1.1 Product identifier**
- **Trade name:** ETC BOND 556 ACTIVATOR (PART A)
- **Article number:** 50380-556A
- **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](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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**



GHS05 corrosion

Skin Corr. 1B      H314 Causes severe skin burns and eye damage.  
Eye Dam. 1      H318 Causes serious eye damage.



GHS07

Skin Sens. 1      H317 May cause an allergic skin reaction.  
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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



GHS05    GHS07

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
3,6,9-triazaundecamethylenediamine  
3,6-diazaoctanethylenediamin
- **Hazard statements**  
H314 Causes severe skin burns and eye damage.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 1)

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

· **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).

P362+P364 Take off contaminated clothing and wash it before reuse.

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

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctanethylenediamin ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	>2.5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundecamethylenediamine ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	>2.5-≤10%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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:**

Call for a doctor immediately.

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.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 2)

- **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.

### 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:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
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**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

(Contd. on page 4)

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

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 3)

- **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.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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:

<b>Form:</b>	Pasty
<b>Colour:</b>	Silver grey
<b>Odour:</b>	Amine-like
<b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

#### · Change in condition

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	333 °C

· **Flash point:** 163 °C

· **Flammability (solid, gas):** Not applicable.

(Contd. on page 5)

GB



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

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 4)

· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC (EC)</b>	0.00 %
<b>Solids content:</b>	0.0 %
· <b>9.2 Other information</b>	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** Based on available data, the classification criteria are not met.

· <b>LD/LC50 values relevant for classification:</b>		
<b>112-24-3 3,6-diazaoctanethylenediamin</b>		
Oral	LD50	2,500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)
<b>112-57-2 3,6,9-triazaundecamethylenediamine</b>		
Dermal	LD50	660 mg/kg (rabbit)

(Contd. on page 6)

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

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 5)

- **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**  
May cause an allergic skin reaction.
- **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.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even small quantities leak into the ground.  
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1760

(Contd. on page 7)

GB

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

Printing date 21.08.2020

Revision: 21.08.2020

Trade name: ETC BOND 556 ACTIVATOR (PART A)

(Contd. of page 6)

· **14.2 UN proper shipping name**  
· **ADR** 1760 CORROSIVE LIQUID, N.O.S.  
(TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)  
· **IMDG, IATA** CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)

· **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:** F-A,S-B· **Segregation groups** Alkalis· **Stowage Category** B· **Stowage Code** SW2 Clear of living quarters.· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)** 1L· **Excepted quantities (EQ)** Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category** 2· **Tunnel restriction code** E· **IMDG**· **Limited quantities (LQ)** 1L· **Excepted quantities (EQ)** Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**UN 1760 CORROSIVE LIQUID, N.O.S.  
(TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE), 8, II

GB

(Contd. on page 8)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 21.08.2020

Revision: 21.08.2020

**Trade name: ETC BOND 556 ACTIVATOR (PART A)**

(Contd. of page 7)

### 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** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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.*

- **Relevant phrases**

- H302 Harmful if swallowed.*
- H312 Harmful in contact with skin.*
- H314 Causes severe skin burns and eye damage.*
- H315 Causes skin irritation.*
- H317 May cause an allergic skin reaction.*
- H411 Toxic to aquatic life with long lasting effects.*
- H412 Harmful to aquatic life with long lasting effects.*

- **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport 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*
- ELINCS: European List of Notified Chemical Substances*
- CAS: Chemical Abstracts Service (division of the American Chemical Society)*
- VOC: Volatile Organic Compounds (USA, EU)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*
- Acute Tox. 4: Acute toxicity - oral - Category 4*
- Skin Corr. 1B: Skin corrosion/irritation - Category 1B*
- Skin Irrit. 2: Skin corrosion/irritation - Category 2*
- Eye Dam. 1: Serious eye damage/eye irritation - Category 1*
- Skin Sens. 1: Skin sensitisation - Category 1*
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2*
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3*

GB

# Veiligheidsinformatieblad volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

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

- **1.1 Productidentificatie**
- **Handelsnaam:** ETC BOND 556 ACTIVATOR (PART A)
- **Artikelnummer:** 50380-556A
- **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](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Aurion**  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: [info@aurion.nl](mailto: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

Skin Corr. 1B      H314 Veroorzaakt ernstige brandwonden en oogletsel.  
Eye Dam. 1      H318 Veroorzaakt ernstig oogletsel.



GHS07

Skin Sens. 1      H317 Kan een allergische huidreactie veroorzaken.

Aquatic Chronic 3 H412 Schadelijk voor in het water levende organismen, met langdurige gevolgen.

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

(Vervolg op blz. 2)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**

(Vervolg van blz. 1)

**· Gevarenpictogrammen**


GHS05 GHS07

**· Signaalwoord Gevaar**
**· Gevaaraanduidende componenten voor de etikettering:**

1,11-diamino-3,6,9-triazaundecaan

1,8-diamino-3,6-diazaoctaan

**· Gevarenaanduidingen**

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H317 Kan een allergische huidreactie veroorzaken.

H412 Schadelijk voor in het water levende organismen, met langdurige gevolgen.

**· 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).

P362+P364 Verontreinigde kleding uittrekken en wassen alvorens deze opnieuw te gebruiken.

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

**· 3.2 Chemische karakterisering: Mengsels**
**· Beschrijving:** Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

**· Gevaarlijke inhoudstoffen:**

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	1,8-diamino-3,6-diazaoctaan ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; ⚠ Skin Sens. 1, H317; Aquatic Chronic 3, H412	>2,5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	1,11-diamino-3,6,9-triazaundecaan ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	>2,5-≤10%

**· Aanvullende gegevens:**

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

(Vervolg op blz. 3)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)

(Vervolg van blz. 2)

### RUBRIEK 4: Eerstehulpmaatregelen

#### · 4.1 Beschrijving van de eerstehulpmaatregelen

##### · Algemene informatie:

Verontreinigde kleding onmiddellijk uittrekken.

Het is mogelijk dat vergiftigingssymptomen pas na vele uren optreden. Om deze reden is medische controle gedurende minstens 48 uur na een ongeval noodzakelijk.

##### · Na het inademen:

Veel verse lucht toedienen en voor alle zekerheid een arts raadplegen.

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:

Onmiddellijk arts raadplegen.

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.

### 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 brandweertieners

##### · Speciale beschermende kleding: Geen bijzondere maatregelen nodig.

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

#### · 6.1 Persoonlijke voorzorgsmaatregelen, beschermde uitrusting en noodprocedures

Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.

#### · 6.2 Milieuvoorzorgsmaatregelen:

Bij indringen in afvalwater of riolering moet de bevoegde instantie gewaarschuwd worden.

Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.

#### · 6.3 Insluitings- en reinigingsmethoden en -materiaal:

Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.

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

Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.

Aërosolvorming vermijden.

##### · Informatie m.b.t. brand- en ontploffingsgevaar: Geen bijzondere maatregelen noodzakelijk.

(Vervolg op blz. 4)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**

(Vervolg van blz. 3)

- **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

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.
- **8.1 Controleparameters**
- **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**  
Het produkt bevat geen relevante hoeveelheden van stoffen, die met betrekking tot de werkplaatsen, qua grenswaarden gecontroleerd moeten worden.
- **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 vermijden.  
Aanraking met de ogen en de huid vermijden.
- **Ademhalingsbescherming:**  
Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.
- **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. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.
  - **Doordringingstijd van het handschoenmateriaal**  
De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.
  - **Oogbescherming:**



Nauw aansluitende veiligheidsbril

NL

(Vervolg op blz. 5)



# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)

(Vervolg van blz. 4)

### RUBRIEK 9: Fysische en chemische eigenschappen

#### · 9.1 Informatie over fysische en chemische basiseigenschappen

##### · Algemene gegevens

##### · Voorkomen:

Vorm:	Pasteus
Kleur:	Zilvergrijs
Geur:	Amine-achtig
Geurdrempelwaarde:	Niet bepaald.

· pH-waarde: Niet bepaald.

##### · Toestandsverandering

Smelt-/vriespunt:	Niet bepaald.
Beginkookpunt en kooktraject:	333 °C

· Vlampunt: 163 °C

· Ontvlambaarheid (vast, gas): Niet bruikbaar.

· Ontledingstemperatuur: Niet bepaald.

· Zelfontbrandingstemperatuur: Het produkt ontbrandt niet uit zichzelf.

· Ontploffingseigenschappen: Het produkt is niet ontploffingsgevaarlijk.

##### · Ontploffingsgrenzen:

Onderste:	Niet bepaald.
Bovenste:	Niet bepaald.

· Dampspanning: Niet bepaald.

Dichtheid: Niet bepaald.

· Relatieve dichtheid: Niet bepaald.

· Dampdichtheid: Niet bepaald.

· Verdampingssnelheid: Niet bepaald.

##### · Oplosbaarheid in/mengbaarheid met

Water: Niet resp. gering mengbaar.

· Verdelingscoëfficiënt: n-octanol/water: Niet bepaald.

##### · Viscositeit

Dynamisch: Niet bepaald.

Kinematisch: Niet bepaald.

##### · Oplosmiddelgehalte:

VOC (EG) 0,00 %

Gehalte aan vaste bestanddelen: 0,0 %

· 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.

(Vervolg op blz. 6)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**

(Vervolg van blz. 5)

- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

- **Indelingsrelevantie LD/LC50-waarden:**

#### 112-24-3 1,8-diamino-3,6-diazaoctaan

Oraal	LD50	2.500 mg/kg (rat)
Dermaal	LD50	805 mg/kg (rabbit)

#### 112-57-2 1,11-diamino-3,6,9-triazaundecaan

Dermaal	LD50	660 mg/kg (rabbit)
---------	------	--------------------

- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt ernstige brandwonden en oogletsel.
- **Ernstig oogletsel/oogirritatie**  
Veroorzaakt ernstig oogletsel.
- **Sensibilisatie van de luchtwegen/de huid**  
Kan een allergische huidreactie veroorzaken.
- **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.
- **Ecotoxische effecten:**
- **Opmerking:** Schadelijk voor vissen.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL): A(3) schadelijk voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken  
Gevaar voor water klasse 2 (D) (Zelfclassificatie): gevaar voor water  
Niet lozen in grondwater, in oppervlaktewater of in riolering.  
Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.  
Gevaar voor drinkwater zelfs bij uitlopen van geringe hoeveelheden in de ondergrond.  
schadelijk voor in het water levende organismen
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.

(Vervolg op blz. 7)

# Veiligheidsinformatieblad

## volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**


(Vervolg van blz. 6)

· **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 terecht komen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 VN-nummer</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p style="text-align: center;">UNI760</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | <p style="text-align: center;">1760 BIJTENDE VLOEISTOF, N.E.G.<br/>(TRIETHYLENETETRAMINE,<br/>TETRAETHYLEN-PENTAMINE)<br/>CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE,<br/>TETRAETHYLEN-PENTAMINE)</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transportgevarenklasse(n)</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <div style="text-align: center;">  </div> <p>· <b>klasse</b> 8 Bijtende stoffen<br/>· <b>Etiket</b> 8</p>              |
| <ul style="list-style-type: none"> <li>· <b>14.4 Verpakkingsgroep:</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p style="text-align: center;">II</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Milieugevaren:</b></li> </ul>  | <p style="text-align: center;">Niet bruikbaar.</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.6 Bijzondere voorzorgen voor de gebruiker</b></li> <li>· <b>Gevaarsidentificatienummer (Kemler-getal):</b></li> <li>· <b>EMS-nummer:</b></li> <li>· <b>Segregation groups</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Stowage Code</b></li> </ul> | <p>Waarschuwing: Bijtende stoffen<br/>80<br/>F-A,S-B<br/>Alkalis<br/>B<br/>SW2 Clear of living quarters.</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b></li> </ul>   | <p style="text-align: center;">Niet bruikbaar.</p>  |
| <ul style="list-style-type: none"> <li>· <b>Transport/verdere gegevens:</b></li> </ul>  |   |
| <ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Beperkte hoeveelheden (LQ)</b></li> <li>· <b>Uitgezonderde hoeveelheden (EQ)</b></li> <li>· <b>Vervoerscategorie</b></li> </ul>   | <p style="text-align: center;">1L<br/>Code: E2<br/>Grootste netto hoeveelheid per binnenverpakking: 30 ml<br/>Grootste netto hoeveelheid per buitenverpakking: 500 ml<br/>2</p>                           |

(Vervolg op blz. 8)

# Veiligheidsinformatieblad

volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**

(Vervolg van blz. 7)

· <b>Tunnelbeperkingscode</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>VN "Model Regulation":</b>	UN 1760 BIJTENDE VLOEISTOF, N.E.G. ( T R I E T H Y L E E N T E T R A M I N E , TETRAETHYLEENPENTAMINE), 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**

geen der bestanddelen staat op de lijst.

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

geen der bestanddelen staat op de lijst.

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3

· **Nationale voorschriften:**

· **Gevaarklasse v. water:**

Waterbezwaarlijkheid (NL): A(3) schadelijk voor in water levende organismen kan in het aquatische milieu op lange termijn schadelijke effecten veroorzaken

· **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 produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

· **Relevante zinnen**

H302 Schadelijk bij inslikken.

H312 Schadelijk bij contact met de huid.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H315 Veroorzaakt huidirritatie.

(Vervolg op blz. 9)

**Veiligheidsinformatieblad**  
volgens 1907/2006/EG, Artikel 31

datum van de druk: 21.08.2020

Herziening van: 21.08.2020

**Handelsnaam: ETC BOND 556 ACTIVATOR (PART A)**

(Vervolg van blz. 8)

*H317 Kan een allergische huidreactie veroorzaken.**H411 Giftig voor in het water levende organismen, met langdurige gevolgen.**H412 Schadelijk voor in het water levende organismen, met langdurige gevolgen.***Afkortingen en acroniemen:***ADR: Accord européen sur le transport 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**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxiciteit - oraal – Categorie 4**Skin Corr. 1B: Huidcorrosie/-irritatie – Categorie 1B**Skin Irrit. 2: Huidcorrosie/-irritatie – Categorie 2**Eye Dam. 1: Ernstig oogletsel/oogirritatie – Categorie 1**Skin Sens. 1: Sensibilisatie van de huid – Categorie 1**Aquatic Chronic 2: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 2**Aquatic Chronic 3: Gevaar voor het aquatisch milieu - aquatisch gevaar op lange termijn – Categorie 3*

NL

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

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

- **1.1 Identificateur de produit**
- **Nom du produit:** ETC BOND 556 ACTIVATOR (PART A)
- **Code du produit:** 50380-556A
- **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](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://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

Skin Corr. 1B      H314 Provoque des brûlures de la peau et de graves lésions des yeux.  
Eye Dam. 1      H318 Provoque de graves lésions des yeux.



GHS07

Skin Sens. 1      H317 Peut provoquer une allergie cutanée.  
Aquatic Chronic 3 H412 Nocif pour les organismes aquatiques, entraîne des effets néfastes à long terme.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.
- **Pictogrammes de danger**



GHS05



GHS07

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
3,6,9-triazaundécane-1,11-diamine  
3,6-diazaoctane-1,8-diamine
- **Mentions de danger**  
H314 Provoque des brûlures de la peau et de graves lésions des yeux.  
H317 Peut provoquer une allergie cutanée.

(suite page 2)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

**Nom du produit: ETC BOND 556 ACTIVATOR (PART A)**

(suite de la page 1)

H412 Nocif pour les organismes aquatiques, entraîne des effets néfastes à long terme.

· **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).

P362+P364 Enlever les vêtements contaminés et les laver avant réutilisation.

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

· **3.2 Caractérisation chimique: Mélanges**

· **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· **Composants dangereux:**

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctane-1,8-diamine ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	>2,5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundécane-1,11-diamine ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	>2,5-≤10%

· **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

### RUBRIQUE 4: Premiers secours

· **4.1 Description des premiers secours**

· **Remarques générales:**

Enlever immédiatement les vêtements contaminés par le produit.

Les symptômes d'intoxication peuvent apparaître après de nombreuses heures seulement; une surveillance médicale est donc nécessaire au moins 48 heures après un accident.

· **Après inhalation:**

Donner de l'air frais en abondance et consulter un médecin pour plus de sécurité.

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:**

Consulter immédiatement un médecin.

Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.

(suite page 3)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

**Nom du produit: ETC BOND 556 ACTIVATOR (PART A)**

(suite de la page 2)

- **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.
- **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:**  
En cas de pénétration dans les eaux ou les égouts, avvertir les autorités compétentes.  
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:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Utiliser un neutralisant.  
Evacuer 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**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Eviter la formation d'aérosols.
- **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

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

(suite page 4)



# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

**Nom du produit: ETC BOND 556 ACTIVATOR (PART A)**

(suite de la page 3)

- **8.1 Paramètres de contrôle**
- **Composants présentant des valeurs-seuil à surveiller par poste de travail:**  
Le produit ne contient pas en quantité significative des substances présentant des valeurs-seuil à surveiller par poste de travail.
- **Remarques supplémentaires:**  
Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.
- **8.2 Contrôles de l'exposition**
- **Equipement 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.  
Eviter tout contact avec les yeux.  
Eviter tout contact avec les yeux et avec la peau.
- **Protection respiratoire:**  
En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.
- **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 dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.
  - **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:**

<b>Forme:</b>	Pâteuse
<b>Couleur:</b>	Gris argent
<b>Odeur:</b>	Aminée
<b>Seuil olfactif:</b>	Non déterminé.
- **valeur du pH:** Non déterminé.

(suite page 5)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

Nom du produit: ETC BOND 556 ACTIVATOR (PART A)

(suite de la page 4)

· <b>Changement d'état</b> Point de fusion/point de congélation:	Non déterminé.
Point initial d'ébullition et intervalle d'ébullition:	333 °C
· <b>Point d'éclair</b>	163 °C
· <b>Inflammabilité (solide, gaz):</b>	Non applicable.
· <b>Température de décomposition:</b>	Non déterminé.
· <b>Température d'auto-inflammabilité:</b>	Le produit ne s'enflamme pas spontanément.
· <b>Propriétés explosives:</b>	Le produit n'est pas explosif.
· <b>Limites d'explosion:</b> Inférieure:	Non déterminé.
Supérieure:	Non déterminé.
· <b>Pression de vapeur:</b>	Non déterminé.
· <b>Densité:</b>	Non déterminée.
· <b>Densité relative</b>	Non déterminé.
· <b>Densité de vapeur:</b>	Non déterminé.
· <b>Taux d'évaporation:</b>	Non déterminé.
· <b>Solubilité dans/miscibilité avec l'eau:</b>	Pas ou peu miscible
· <b>Coefficient de partage: n-octanol/eau:</b>	Non déterminé.
· <b>Viscosité:</b> Dynamique:	Non déterminé.
Cinématique:	Non déterminé.
· <b>Teneur en solvants:</b> VOC (CE)	0,00 %
· <b>Teneur en substances solides:</b>	0,0 %
· <b>9.2 Autres informations</b>	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** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

(suite page 6)

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

**Nom du produit: ETC BOND 556 ACTIVATOR (PART A)**

(suite de la page 5)

· Valeurs LD/LC50 déterminantes pour la classification:		
<b>112-24-3 3,6-diazaoctane-1,8-diamine</b>		
Oral	LD50	2.500 mg/kg (rat)
Dermique	LD50	805 mg/kg (lapin)
<b>112-57-2 3,6,9-triazaundécane-1,11-diamine</b>		
Dermique	LD50	660 mg/kg (lapin)

- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Provoque des 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**  
Peut provoquer une allergie cutanée.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité 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.

### 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.
- **Effets écotoxiques:**
- **Remarque:** Nocif pour les poissons.
- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 2 (D) (Classification propre): polluant  
Ne pas laisser pénétrer dans 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.  
Danger pour l'eau potable dès fuite d'une petite quantité dans le sous-sol.  
Nocif pour les organismes aquatiques.
- **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.

(suite page 7)

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

Date d'impression : 21.08.2020

Révision: 21.08.2020

Nom du produit: ETC BOND 556 ACTIVATOR (PART A)

(suite de la page 6)

- Emballages non nettoyés:
- **Recommandation:** Evacuation conformément aux prescriptions légales.

### RUBRIQUE 14: Informations relatives au transport

<ul style="list-style-type: none"> <li>· 14.1 Numéro ONU</li> <li>· ADR, IMDG, IATA</li> </ul>	<p align="center">UN1760</p>
<ul style="list-style-type: none"> <li>· 14.2 Désignation officielle de transport de l'ONU</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>	<p align="center">1760 LIQUIDE CORROSIF, N.S.A. ( TRI ÉTHYLÈNETÉTRAMINE, TÉTRAÉTHYLÈNEPENTAMINE) CORROSIVE LIQUID, N.O.S. ( TRIETHYLENETETRAMINE, TETRAETHYLENEPENTAMINE)</p>
<ul style="list-style-type: none"> <li>· 14.3 Classe(s) de danger pour le transport</li> <li>· ADR, IMDG, IATA</li> </ul>	<div style="text-align: center;"> <p>8</p> </div> <p>· Classe</p> <p>· Étiquette</p>
<ul style="list-style-type: none"> <li>· Classe</li> <li>· Étiquette</li> </ul>	<p>8 Matières corrosives.</p> <p>8</p>
<ul style="list-style-type: none"> <li>· 14.4 Groupe d'emballage</li> <li>· ADR, IMDG, IATA</li> </ul>	<p align="center">II</p>
<ul style="list-style-type: none"> <li>· 14.5 Dangers pour l'environnement:</li> </ul>	<p align="center">Non applicable.</p>
<ul style="list-style-type: none"> <li>· 14.6 Précautions particulières à prendre par l'utilisateur</li> <li>· Numéro d'identification du danger (Indice Kemler):</li> <li>· No EMS:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> <li>· Stowage Code</li> </ul>	<p>Attention: Matières corrosives.</p> <p>80</p> <p>F-A,S-B</p> <p>Alkalis</p> <p>B</p> <p>SW2 Clear of living quarters.</p>
<ul style="list-style-type: none"> <li>· 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</li> </ul>	<p align="center">Non applicable.</p>
<ul style="list-style-type: none"> <li>· Indications complémentaires de transport:</li> </ul>	
<ul style="list-style-type: none"> <li>· ADR</li> <li>· Quantités limitées (LQ)</li> <li>· Quantités exceptées (EQ)</li> <li>· Catégorie de transport</li> <li>· Code de restriction en tunnels</li> </ul>	<p>1L</p> <p>Code: E2</p> <p>Quantité maximale nette par emballage intérieur: 30 ml</p> <p>Quantité maximale nette par emballage extérieur: 500 ml</p> <p>2</p> <p>E</p>

(suite page 8)

FR

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 21.08.2020

Révision: 21.08.2020

**Nom du produit: ETC BOND 556 ACTIVATOR (PART A)**

(suite de la page 7)

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **"Règlement type" de l'ONU:**

UN 1760 LIQUIDE CORROSIF, N.S.A.  
( TRI É T H Y L È N E T É T R A M I N E ,  
TÉTRAÉTHYLÈNEPENTAMINE), 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** Aucun des composants n'est compris.
- **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3
- **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.

· **Phrases importantes**

H302 Nocif en cas d'ingestion.

H312 Nocif par contact cutané.

H314 Provoque des brûlures de la peau et de graves lésions des yeux.

H315 Provoque une irritation cutanée.

H317 Peut provoquer une allergie cutanée.

H411 Toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.

H412 Nocif pour les organismes aquatiques, entraîne des effets néfastes à long terme.

· **Acronymes et abréviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route

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

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicité aiguë - voie orale – Catégorie 4

Skin Corr. 1B: Corrosion cutanée/irritation cutanée – Catégorie 1B

Skin Irrit. 2: Corrosion cutanée/irritation cutanée – Catégorie 2

Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1

Skin Sens. 1: Sensibilisation cutanée – Catégorie 1

Aquatic Chronic 2: Dangers pour le milieu aquatique- toxicité à long terme pour le milieu aquatique – Catégorie 2

Aquatic Chronic 3: Dangers pour le milieu aquatique- toxicité à long terme pour le milieu aquatique – Catégorie 3

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

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

- **1.1 Produktidentifikator**
- **Handelsname:** ETC BOND 556 ACTIVATOR (PART A)
- **Artikelnummer:** 50380-556A
- **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 Munchen, 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

Skin Corr. 1B

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

Eye Dam. 1

H318 Verursacht schwere Augenschäden.



GHS07

Skin Sens. 1

H317 Kann allergische Hautreaktionen verursachen.

Aquatic Chronic 3

H412 Schädlich für Wasserorganismen, mit langfristiger Wirkung.

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

(Fortsetzung auf Seite 2)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 1)

**Gefahrenpiktogramme**


GHS05 GHS07

**Signalwort Gefahr**
**Gefahrbestimmende Komponenten zur Etikettierung:**

3,6,9-Triazaundecan-1,11-diamin

3,6-Diazaoctan-1,8-diamin

**Gefahrenhinweise**

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H317 Kann allergische Hautreaktionen verursachen.

H412 Schädlich für Wasserorganismen, mit langfristiger Wirkung.

**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 dieser Kennzeichnungsetikett).

P362+P364 Kontaminierte Kleidung ausziehen und vor erneutem Tragen waschen.

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

**3.2 Chemische Charakterisierung: Gemische**
**Beschreibung:** Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

**Gefährliche Inhaltsstoffe:**

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	3,6-Diazaoctan-1,8-diamin ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	>2,5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-Triazaundecan-1,11-diamin ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	>2,5-≤10%

**Zusätzliche Hinweise:** Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

(Fortsetzung auf Seite 3)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 2)

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

#### · 4.1 Beschreibung der Erste-Hilfe-Maßnahmen

##### · **Allgemeine Hinweise:**

Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.

Vergiftungssymptome können erst nach vielen Stunden auftreten, deshalb ärztliche Überwachung mindestens 48 Stunden nach einem Unfall.

##### · **Nach Einatmen:**

Reichlich Frischluftzufuhr und sicherheitshalber Arzt aufsuchen.

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:**

Sofort Arzt aufsuchen.

Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.

#### · 4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen

Keine weiteren relevanten Informationen verfügbar.

#### · 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:

Bei Eindringen in Gewässer oder Kanalisation zuständige Behörden benachrichtigen.

Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.

#### · 6.3 Methoden und Material für Rückhaltung und Reinigung:

Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.

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

Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.

(Fortsetzung auf Seite 4)



# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 3)

- Aerosolbildung vermeiden.
- **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 Betriebsicherheitsverordnung (BetrSichV):** -
- **7.3 Spezifische Endanwendungen** Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

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

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

112-24-3 3,6-Diazaoctan-1,8-diamin
------------------------------------

MAK als Dampf und Aerosol; vgl. Abschn. IV
--

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

- **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 vermeiden.

Berührung mit den Augen und der Haut vermeiden.

- **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition umluftunabhängiges Atemschutzgerät verwenden.

- **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. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

- **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

(Fortsetzung auf Seite 5)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 4)

**· Augenschutz:**


Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

**· 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften**
**· Allgemeine Angaben**
**· Aussehen:**

<b>Form:</b>	Pastös
<b>Farbe:</b>	Silbergrau
<b>Geruch:</b>	Aminartig
<b>Geruchsschwelle:</b>	Nicht bestimmt.

**· pH-Wert:** Nicht bestimmt.

**· Zustandsänderung**

<b>Schmelzpunkt/Gefrierpunkt:</b>	Nicht bestimmt.
<b>Siedebeginn und Siedebereich:</b>	333 °C

**· Flammpunkt:** 163 °C

**· Entzündbarkeit (fest, gasförmig):** Nicht anwendbar.

**· Zersetzungstemperatur:** Nicht bestimmt.

**· Selbstentzündungstemperatur:** Das Produkt ist nicht selbstentzündlich.

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

**· Explosionsgrenzen:**

<b>Untere:</b>	Nicht bestimmt.
<b>Obere:</b>	Nicht bestimmt.

**· Dampfdruck:** Nicht bestimmt.

**· Dichte:** Nicht bestimmt.

**· Relative Dichte** Nicht bestimmt.

**· Dampfdichte** Nicht bestimmt.

**· Verdampfungsgeschwindigkeit** Nicht bestimmt.

**· Löslichkeit in / Mischbarkeit mit**
**Wasser:** Nicht bzw. wenig mischbar.

**· Verteilungskoeffizient: n-Octanol/Wasser:** Nicht bestimmt.

**· Viskosität:**

<b>Dynamisch:</b>	Nicht bestimmt.
<b>Kinematisch:</b>	Nicht bestimmt.

**· Lösemittelgehalt:**
**VOC (EU)** 0,00 %

**Festkörpergehalt:** 0,0 %

**· 9.2 Sonstige Angaben** Keine weiteren relevanten Informationen verfügbar.

DE

(Fortsetzung auf Seite 6)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

Handelsname: ETC BOND 556 ACTIVATOR (PART A)

(Fortsetzung von Seite 5)

### 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** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

- **Einstufungsrelevante LD/LC50-Werte:**

#### 112-24-3 3,6-Diazaoctan-1,8-diamin

Oral	LD50	2.500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

#### 112-57-2 3,6,9-Triazaundecan-1,11-diamin

Dermal	LD50	660 mg/kg (rabbit)
--------	------	--------------------

- **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**  
Kann allergische Hautreaktionen verursachen.
- **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.
- **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.
- **Ökotoxische Wirkungen:**
- **Bemerkung:** Schädlich für Fische.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 2 (Selbsteinstufung): deutlich wassergefährdend

(Fortsetzung auf Seite 7)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 6)

Nicht in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen.  
Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.  
Trinkwassergefährdung bereits beim Auslaufen geringer Mengen in den Untergrund.  
schädlich für Wasserorganismen

- **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.

### ABSCHNITT 14: Angaben zum Transport

· **14.1 UN-Nummer**

· **ADR, IMDG, IATA**

UNI760

· **14.2 Ordnungsgemäße UN-Versandbezeichnung**

· **ADR**

· **IMDG, IATA**

1760 ÄTZENDER FLÜSSIGER STOFF, N.A.G.  
(TRIETHYLENTETRAMIN, TETRAETHYLENPENTAMIN)  
CORROSIVE LIQUID, N.O.S.  
(TRIETHYLENETETRAMINE,  
TETRAETHYLENPENTAMINE)

· **14.3 Transportgefahrenklassen**

· **ADR, IMDG, IATA**



· **Klasse**

8 Ätzende Stoffe

· **Gefahrzettel**

8

· **14.4 Verpackungsgruppe**

· **ADR, IMDG, IATA**

II

· **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:**

F-A,S-B

· **Segregation groups**

Alkalis

· **Stowage Category**

B

· **Stowage Code**

SW2 Clear of living quarters.

(Fortsetzung auf Seite 8)

# Sicherheitsdatenblatt

## gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 7)

· **14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code** Nicht anwendbar.

· **Transport/weitere Angaben:**

· **ADR**

· **Begrenzte Menge (LQ)**

1L

· **Freigestellte Mengen (EQ)**

Code: E2

Höchste Nettomenge je Innenverpackung: 30 ml

Höchste Nettomenge je Außenverpackung: 500 ml

· **Beförderungskategorie**

2

· **Tunnelbeschränkungscode**

E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

UN 1760 ÄTZENDER FLÜSSIGER STOFF, N.A.G.  
(TRIETHYLENTETRAMIN, TETRAETHYLENPENTAMIN),  
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** Keiner der Inhaltsstoffe ist enthalten.

· **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3

· **Nationale Vorschriften:**

· **Wassergefährdungsklasse: WGK 2 (Selbsteinstufung):** deutlich wassergefährdend.

· **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.

· **Relevante Sätze**

H302 Gesundheitsschädlich bei Verschlucken.

H312 Gesundheitsschädlich bei Hautkontakt.

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H315 Verursacht Hautreizungen.

H317 Kann allergische Hautreaktionen verursachen.

H411 Giftig für Wasserorganismen, mit langfristiger Wirkung.

H412 Schädlich für Wasserorganismen, mit langfristiger Wirkung.

· **Abkürzungen und Akronyme:**

ADR: Accord européen sur le transport 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

(Fortsetzung auf Seite 9)

**Sicherheitsdatenblatt**  
gemäß 1907/2006/EG, Artikel 31

Druckdatum: 21.08.2020

überarbeitet am: 21.08.2020

**Handelsname: ETC BOND 556 ACTIVATOR (PART A)**

(Fortsetzung von Seite 8)

*ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Akute Toxizität - oral – Kategorie 4**Skin Corr. 1B: Hautreizende/-ätzende Wirkung – Kategorie 1B**Skin Irrit. 2: Hautreizende/-ätzende Wirkung – Kategorie 2**Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1**Skin Sens. 1: Sensibilisierung der Haut – Kategorie 1**Aquatic Chronic 2: Gewässergefährdend - langfristig gewässergefährdend – Kategorie 2**Aquatic Chronic 3: Gewässergefährdend - langfristig gewässergefährdend – Kategorie 3*

DE

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

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

- **1.1 Identificatore del prodotto**
- **Denominazione commerciale:** ETC BOND 556 ACTIVATOR (PART A)
- **Articolo numero:** 50380-556A
- **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](mailto:info@emsdiasum.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Società Italiana Chimici**  
Via Rio Nell Ellba 140  
00138 Rome, Italy  
Tel: 39 06 8800211  
Fax: 39 30 06 8815313  
Web: [www.sichim.com](http://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

Skin Corr. 1B      H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.  
Eye Dam. 1      H318 Provoca gravi lesioni oculari.



GHS07

Skin Sens. 1      H317 Può provocare una reazione allergica cutanea.

Aquatic Chronic 3 H412 Nocivo per gli organismi acquatici con effetti di lunga durata.

- **2.2 Elementi dell'etichetta**
- **Etichettatura secondo il regolamento (CE) n. 1272/2008**  
Il prodotto è classificato ed etichettato conformemente al regolamento CLP.
- **Pittogrammi di pericolo**



GHS05



GHS07

(continua a pagina 2)

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 1)

· **Avvertenza Pericolo**

· **Componenti pericolosi che ne determinano l'etichettatura:**

3,6,9-triazaundecano-1,11-diamino

3,6-diazaottano-1,8-diamina

· **Indicazioni di pericolo**

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

H317 Può provocare una reazione allergica cutanea.

H412 Nocivo per gli organismi acquatici con effetti di lunga durata.

· **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).

P362+P364 Togliere tutti gli indumenti contaminati e lavarli prima di indossarli nuovamente.

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**

· **3.2 Caratteristiche chimiche: Miscela**

· **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.

· **Sostanze pericolose:**

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaottano-1,8-diamina ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	>2,5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundecano-1,11-diamino ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	>2,5-≤10%

· **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

**SEZIONE 4: Misure di primo soccorso**

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:**

Allontanare immediatamente gli abiti contaminati dal prodotto.

I sintomi di avvelenamento possono comparire dopo molte ore, per tale motivo è necessaria la sorveglianza di un medico nelle 48 ore successive all'incidente.

· **Inalazione:**

Portare il soggetto in zona molto ben areata e per sicurezza consultare un medico.

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.

(continua a pagina 3)



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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 2)

- **Contatto con gli occhi:**  
Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.
- **Ingestione:**  
Chiamare subito il medico.  
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.

### **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:**  
In caso di infiltrazione nei corpi d'acqua o nelle fognature avvertire le autorità competenti.  
Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
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 una 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 ventilazione/aspirazione nei luoghi di lavoro.  
Evitare la formazione di aerosol.
- **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**

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

(continua a pagina 4)

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 3)

- **8.1 Parametri di controllo**
- **Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:**  
Il prodotto non contiene quantità rilevanti di sostanze i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro.
- **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.  
Evitare il contatto con gli occhi e la pelle.
- **Maschera protettiva:**  
Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.
- **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. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego
- **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:** Pastoso
  - **Colore:** Grigio argento
- **Odore:** Amminico
- **Soglia olfattiva:** Non definito.
- **valori di pH:** Non definito.

(continua a pagina 5)

IT

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 4)

· <b>Cambiamento di stato</b> Punto di fusione/punto di congelamento:	Non definito.
Punto di ebollizione iniziale e intervallo di ebollizione:	333 °C
· <b>Punto di infiammabilità:</b>	163 °C
· <b>Infiammabilità (solidi, gas):</b>	Non applicabile.
· <b>Temperatura di decomposizione:</b>	Non definito.
· <b>Temperatura di autoaccensione:</b>	Prodotto non autoinfiammabile.
· <b>Proprietà esplosive:</b>	Prodotto non esplosivo.
· <b>Limiti di infiammabilità:</b> Inferiore:	Non definito.
Superiore:	Non definito.
· <b>Tensione di vapore:</b>	Non definito.
· <b>Densità:</b>	Non definito.
· <b>Densità relativa</b>	Non definito.
· <b>Densità di vapore:</b>	Non definito.
· <b>Velocità di evaporazione</b>	Non definito.
· <b>Solubilità in/Miscibilità con acqua:</b>	Poco e/o non miscibile.
· <b>Coefficiente di ripartizione: n-ottanolo/acqua:</b>	Non definito.
· <b>Viscosità:</b> Dinamica:	Non definito.
Cinematica:	Non definito.
· <b>Tenore del solvente:</b> VOC (CE)	0,00 %
· <b>Contenuto solido:</b>	0,0 %
· <b>9.2 Altre informazioni</b>	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** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

(continua a pagina 6)

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 5)

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

**112-24-3 3,6-diazaottano-1,8-diamina**

Orale LD50 2.500 mg/kg (rat)

Cutaneo LD50 805 mg/kg (rabbit)

**112-57-2 3,6,9-triazaundecano-1,11-diamino**

Cutaneo LD50 660 mg/kg (rabbit)

**· 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**

Può provocare una reazione allergica cutanea.

**· 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.

**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.

**· Effetti tossici per l'ambiente:**

**· Osservazioni:** Nocivo per i pesci.

**· Ulteriori indicazioni in materia ambientale:**

**· Ulteriori indicazioni:**

Pericolosità per le acque classe 2 (D) (Autoclassificazione): pericoloso

Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature.

Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.

Pericolo per le acque potabili anche in caso di perdite nel sottosuolo di piccole quantità di prodotto.

nocivo per gli organismi acquatici

**· 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.

(continua a pagina 7)

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 6)

- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

**SEZIONE 14: Informazioni sul trasporto**

- **14.1 Numero ONU**
- **ADR, IMDG, IATA**

UN1760

- **14.2 Nome di spedizione dell'ONU**
- **ADR**

1760 LIQUIDO CORROSIVO, N.A.S.  
(TRIETILENTETRAMMINA, TETRAETILENPENTAMMINA)  
CORROSIVE LIQUID, N.O.S. (TRIETHYLENETETRAMINE,  
TETRAETHYLENEPENTAMINE)

- **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):**

Attenzione: Materie corrosive  
80

- **Numero EMS:**
- **Segregation groups**
- **Stowage Category**
- **Stowage Code**

F-A,S-B  
Alkalis  
B  
SW2 Clear of living quarters.

- **14.7 Trasporto di rifiuti secondo l'allegato II di MARPOL ed il codice IBC**

Non applicabile.

- **Trasporto/ulteriori indicazioni:**

- **ADR**
- **Quantità limitate (LQ)**
- **Quantità esenti (EQ)**

1L  
Codice: E2  
Quantità massima netta per imballaggio interno: 30 ml  
Quantità massima netta per imballaggio esterno: 500 ml

- **Categoria di trasporto**
- **Codice di restrizione in galleria**

2  
E

- **IMDG**
- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

1L  
Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

(continua a pagina 8)

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

Stampato il: 21.08.2020

Revisione: 21.08.2020

**Denominazione commerciale: ETC BOND 556 ACTIVATOR (PART A)**

(Segue da pagina 7)

· **UN "Model Regulation":** *UN 1760 LIQUIDO CORROSIVO, N.A.S. (TRITILENTETRAMMINA, TETRAETILENPENTAMMINA), 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** Nessuno dei componenti è contenuto.
- **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3
- **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.*

· **Fraasi rilevanti**

- H302 Nocivo se ingerito.*
- H312 Nocivo per contatto con la pelle.*
- H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.*
- H315 Provoca irritazione cutanea.*
- H317 Può provocare una reazione allergica cutanea.*
- H411 Tossico per gli organismi acquatici con effetti di lunga durata.*
- H412 Nocivo per gli organismi acquatici con effetti di lunga durata.*

· **Abbreviazioni e acronimi:**

- ADR: Accord européen sur le transport 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*
- ELINCS: European List of Notified Chemical Substances*
- CAS: Chemical Abstracts Service (division of the American Chemical Society)*
- VOC: Volatile Organic Compounds (USA, EU)*
- LC50: Lethal concentration, 50 percent*
- LD50: Lethal dose, 50 percent*
- PBT: Persistent, Bioaccumulative and Toxic*
- vPvB: very Persistent and very Bioaccumulative*
- Acute Tox. 4: Tossicità acuta per via orale – Categoria 4*
- Skin Corr. 1B: Corrosione/irritazione della pelle – Categoria 1B*
- Skin Irrit. 2: Corrosione/irritazione della pelle – Categoria 2*
- Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1*
- Skin Sens. 1: Sensibilizzazione della pelle – Categoria 1*
- Aquatic Chronic 2: Pericoloso per l'ambiente acquatico - pericolo a lungo termine per l'ambiente acquatico – Categoria 2*
- Aquatic Chronic 3: Pericoloso per l'ambiente acquatico - pericolo a lungo termine per l'ambiente acquatico – Categoria 3*



# 물질안전보건자료

## GHS에 따라라따

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(1 쪽부터계속)

**· 그림문자**



GHS05 GHS07

**· 신호어 위험**

**· 상표상에명확히위험성이표시된성분:**

- Versamid 140
- Polyamide Resin
- 3,6,9-triazaundecamethylenediamine
- 3,6-diazaoctanethylenediamin

**· 유해**

- 피부에 심한 화상과 눈에 손상을 일으킴
- 알레르기성 피부 반응을 일으킬 수 있음
- 장기적 영향에 의해 수생생물에 유해함

**· 예방조치**

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.

오염된 의복은 벗고 다시 사용 전 세척하십시오.

밀봉하여 저장하십시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

**· 기타기타**

- PBT(잔류성, 생물농축성, 독성물질) 및 vPvB(고 잔류성, 고 생물농축성, 독성물질)에 해당하지 않음.
- PBT(잔류성, 생물농축성, 독성물질)에 해당하지 않음.
- vPvB(고 잔류성, 고 생물농축성, 독성물질)에 해당하지 않음.

### 3 구성성분의 명칭 및 함유량

**· 화학적 특성: 혼합물**

설명설명설명해한 첨 가 물 이 함유된 아래에 열 거 된 물 질 로 만 들 어 진 혼 합 물.

**· 위험요소요소**

68410-23-1	Versamid 140 Polyamide Resin ⚠ 급성 독성 - 경구 - 구분 4, H302; 피부 부식성/피부 자극성 - 구분 2, H315	>10-≤25%
112-24-3	3,6-diazaoctanethylenediamin ⚠ 피부 부식성/피부 자극성 - 구분 1, H314; ⚠ 급성 독성 - 경피 - 구분 4, H312; 피부 과민성 - 구분 1, H317; 수생환경 유해성 - 만성3, H412	>2.5-≤10%
112-57-2	3,6,9-triazaundecamethylenediamine ⚠ 피부 부식성/피부 자극성 - 구분 1, H314; ⚠ 수생환경 유해성 - 만성2, H411; ⚠ 급성 독성 - 경구 - 구분 4, H302; ⚠ 급성 독성 - 경피 - 구분 4, H312; 피부 과민성 - 구분 1, H317	>2.5-≤10%

KR

(3 쪽에계속)



# 물질안전보건자료 GHS에 따라라따

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(2 쪽부터계속)

## 4 응급조치 요령

- **응급조치요령 내용내용**
  - **일반적 정보정보**  
이제품에 의해 오염 된 의상은 즉시제 거 한다.  
중 독 증 상 은 몇 시 간 이 지 난 뒤 에 발 생 할 수 있 다. 따 라 서 사 고 가 발 생 한 후 에 적 어 도 48 시 간 동 안 은 의 료 진 의 관 찰 을 받 아 야 한 다.
  - **흡입했을 때:**  
신 선 한 공 기 를 쐬 고 나 서 반 드 시 의 료 진 의 도 움 을 구 한 다.  
환 자 가 의 식 을 잃 었 을 경 우 에 는 안 전 한 자 세 에 서 환 자 를 운 반 한 다.
  - **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행 군 다.
  - **눈에 눈에 들어갔을 때:** 흐 르 는 물 에 눈 을 몇 분 동 안 씻 어 내 고 나 서, 의 사 와 상 담 한 다
  - **먹었을 때:**  
즉 시 의 사 의 도 움 을 구 한 다.  
물 을 충 분 히 마 시 고 신 선 한 공 기 를 쐬 다. 즉 시 의 사 의 도 움 을 구 한 다.
- 기 타 기 타 의 주 의 사 항 :  
가 장 가 장 중 요 한 단 영 증 상 생 기 는 영 향 영 향 적 인 정 보 가 존 재 하 지 않 습 니 다.  
· **즉각적인 의료처치 및 특별치료가 필요함을 시사 하는 징후 중 후 적 인 정 보 가 존 재 하 지 않 습 니 다.**

## 5 폭발·화재시 대처방법

- **소화제**
  - **적절한 소화제:** 주 변 환 경 에 맞 는 화 재 진 화 방 법 을 사 용 한 다.
  - **본 화학물질이나 혼합물에서 발생 하는 특별한 위험 특성** 추가적인 정보가 존재하지 않습니다.
  - **소방관에 대한 신고 사항**
- 화 재 화 재 진 화 진 화 용 할 보 호 구 및 예 방 조 치: 특 별 한 조 치 가 필 요 없 음.

## 6 누출 사고 시 대처방법

- **개인적 예방조치, 보호장비 및 응급 처치 절차** 전 장 비 착 용 하 고, 무 방 비 의 사 람 은 격 리 시 킨 다.
- 환 경 환 경 보 호 관 리 조 치:  
하 천 이 나 하 수 도 로 유 입 되 었 을 경 우 해 당 관 청 에 보 고 한 다.  
하 수 도 망 / 해 수 면 위 의 물 / 지 하 수 로 도 달 하 지 않 게 한 다.
- 밀 폐 밀 폐 및 환 기 정 화 정 화 소 재 소 재  
액 체 가 혼 합 된 물 질 (모 래, 규 조 토, 산 성 결 합 물, 일 반 결 합 물, 톱 밥) 에 흡 입 되 도 록 한 다.  
중 성 제 를 사 용 한 다.  
항 목 13 에 따 라 오 염 된 물 질 을 쓰 레 기 로 처 분 한 다.  
충 분 한 환 기 가 되 도 록 한 다.
- 석 더 석 더 석 더 참 조  
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 취급 취급
  - **안전 안전 작업 을 위 한 예 방 조 치**  
작 업 장 에 서 는 통 풍 이 잘 되 고 / 습 기 제 거 가 잘 되 게 주 의 한 다.  
연 무 질 이 형 성 되 는 것 을 피 한 다.
- 화 재 화 재 진 화 진 화 용 할 보 호 구 및 예 방 조 치 에 관 한 정 보 는 별 한 조 치 가 필 요 없 음.

(4 쪽에계속)

# 물질안전보건자료 GHS에 따라라다

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(3 쪽부터계속)

- 혼합위험성물질의 위험성 평가 조건 조건
- 보관보관보관
- 안전항상 저장방법 특별한 요구사항이 없음.
- 하기의 공통항목 시점에 대한 보관항목은 정보 필요 없음
- 보관 조건에 관한 추가적인 정보 정보를 새지않게 밀폐한 채 보관한다.
- 구체적 최종 사용자 추가적인 정보가 존재하지 않습니다.

## 8 노출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보: 더 이상 의 자료는 없음. 항 목 7 을 참고하시 오.

통제 통제 통제 변수

- 화학물질의 노출기준, 생물학적 노출기준 등:

**112-24-3 3,6-diazaoctanethylenediamin**

WEEL (US) 장기간의값: 6 mg/m<sup>3</sup>, 1 ppm  
Skin

**112-57-2 3,6,9-triazaundecamethylenediamine**

WEEL (US) 장기간의값: 5 mg/m<sup>3</sup>  
Skin; DSEN

- 추가정보정보 할 당시에 유 효 한 목 록을 기초로 사용했다.

노출 통제 통제 통제

개인개인 보호구

- 일반적보호조치및위생조치:

- 식료품, 음료수와 사료로부터 멀리떨어뜨려 놓는다.
- 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
- 휴식 전 이 나 작업이 끝날때마다 손을 씻는다.
- 눈과의 접촉을 피한다.
- 눈과 피부와의 접촉은 피한다.

- 호흡기 보호보호

단 시간 또는 경미한 오염의 경우에는 호흡 여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

보수 보호보호



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

적합한장갑의선정은재질차이뿐만아니라품질기준의차이도 고려하여이루어져야하고제조업종에따라서도다르게선정되어야한다. 제품은다양한재료로부터의조제로이루어지는것이기때문에, 장갑재질의안정성은사전예측되어질수있는것이아니고, 반드시사용전에 (그안전성이) 체크되어야한다.

- 장갑재료의투과시간 정확한관통시간은보호장갑제조자에의하여인지되고, 준수되어야한다.

(5 쪽에계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

보호 보호 보호

(4 쪽부터 계속)



꼭조이는보안경

## 9 물리화학적 특성

기본 정보 물리화학적 특성에 대한 기본 정보

· 일반정보	
외형외형의형	부 풀은
· 물리적 상태	은 회색
· 색:	아민종 류의
· 냄새	알맞지 않다.
· 후각역치	
· pH:	알맞지 않다.
· 상태변화	
· 녹는점/어는점:	맞지 않는
· 초기초기 녹는 점과 끓는점 범위	333 °C
· 인화점:	163 °C
· 인화성 고체/기체/기체	해당 사항 없음.
· 분해 온도	알맞지 않다.
· 자기점화:	이제품은 자연발화성이 없다.
· 폭발 위험:	이제품은 폭발 위험성이 없다.
· 인화 안전 온도	알맞지 않다.
· 아래로:	알맞지 않다.
· 위로 위로	알맞지 않다.
· 증기압:	알맞지 않다.
· 밀도	맞지 않는다.
· 비중	알맞지 않다.
· 증기 밀도:	알맞지 않다.
· 증발 증발 속도	알맞지 않다.
· 용해도:	
· 물:	각각의 경우에 따라서는 거의 혼합 할 수 없는
· n 옥탄올/물 분배계수:	알맞지 않다.
· 점도	
· 역학성:	알맞지 않다.
· 동점성:	알맞지 않다.
· 용매 내용물	
· VOC (EU)	0.00 %
· 고체 양 함량	0.0 %
· 기타 정보	추가적인 정보가 존재하지 않습니다.

KR

(6 쪽에 계속)

# 물질안전보건자료

## GHS에 따라 라다

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(5 쪽부터 계속)

### 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건 규정에 따라 사용 할 경우 해체는 없다
- 유해반응 가능성 위험한 반응으로는 알려지지 않았다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.
- 혼합 유해분해물 질 추가적인 정보가 존재하지 않습니다.
- 유해분해물질: 위험성 있는 분해물들은 알려지지 않았다.

### 11 독성에 관한 정보

· 독성학적 영향에 대한 정보  
급성 독성 독성 특성

· LD/LC50-수 체에 따른 분류		
112-24-3 3,6-diazaoctanethylenediamin		
구강의	LD50	2,500 mg/kg (rat)
피부의	LD50	805 mg/kg (rabbit)
112-57-2 3,6,9-triazaundecamethylenediamine		
피부의	LD50	660 mg/kg (rabbit)

- 일차적 자극 효과  
피부 피부 부식성 또는 자극 성: 피부와 점막에 강한 부식 작용.  
심한 심한 부식성 또는 자극 성:  
강한 부식 작용  
심각한 안구상처의 위험이 있는 강한 자극
- 감각화: 피부 접촉을 통하여 감각화 가능성이 있다.
- 추가적인 독성에 관한 정보  
이제 품은 유럽 공동체의 공동 분류 원칙의 합법적인 절차에 근거하여 최근에 발효된 원고에서 아래 위험들의 사전 준비에 대하여 제시하고 있다.  
건강에 해로운  
부식 작용의  
자극적인  
삼킬 경우 식도나 위 등의 내장 기관 벽에 상처를 주는 위험과 마찬가지로 입 주변이나 구강에 강한 부식 작용을 한다

### 12 환경에 미치는 영향

독성 독성 독성

- 수생독성: 추가적인 정보가 존재하지 않습니다.
- 지속성 및 분해성 추가적인 정보가 존재하지 않습니다.
- 환경 시스템에서의 행동:
- 생물농축 잠재성 추가적인 정보가 존재하지 않습니다.
- 토양 내 이동성 추가적인 정보가 존재하지 않습니다.
- 생태독성:

의견 의견 의견에 해 로움

· 추가적인 생태학 정보 정보

일반 열점 특징

- 수질 오염 등급 2 (자체 등급 분류): 수질 오염이 된 지하수나, 하천으로 또는 하수도망에도 달하지 않게 한다.
- 회색 시키지 않은 채 또는 중화 시키지 않은 채 하수도나 배수로에도 달하지 않게 해야 한다.
- 지하수로 경미한 양이 유입 되었을 경우 엔 이미 식수 오염 상태 이다

(7 쪽에 계속)

# 물질안전보건자료

## GHS에 따라라따

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(6 쪽부터계속)

물속의유기체에해가되는것  
 · PBT(잔류성, 생물농축성, 물질독성물질) 및 vPvB(고 잔류성, 고 생물농축성 물질)에 해당하지 않음.  
 · PBT(잔류성, 생물농축성, 물질독성물질) 당사항 없음.  
 · vPvB(고 잔류성, 고 생물농축성 물질) 당사항 없음.  
 기타기타 **부작용** 추가적인 정보가 존재 하지 않습니다.

### 13 폐기시 주의사항

· 폐기물 처리 방법  
 권고 권고 규정을 따라 처리하고, 하수도망으로 유입되어서는 안 된다.  
 · 비위생적 포장 포장  
 권고 권고 규정에 따라 지침에 입각한 처리를 한다.

### 14 운송에 필요한 정보

유엔 유엔 번호 · ADR, IMDG, IATA	UN1760
적정적정명 · ADR  · IMDG, IATA	1760 CORROSIVE LIQUID, N.O.S. ( TRIETHYLENETETRAMINE, TETRAETHYLENEMPENTAMINE)  CORROSIVE LIQUID, N.O.S. ( TRIETHYLENETETRAMINE, TETRAETHYLENEMPENTAMINE)
교통 교통 위험 클래스 · ADR, IMDG, IATA	
등급 등급 등급 · 위험물 라벨라벨	8 부식작용하는물질 8
용기 등급 · ADR, IMDG, IATA	II
환경적 유해물질:	해당사항 없음.
이동시 특별 예방 조치 위험 위험 코드 · E 번호 번호 · Segregation groups · Stowage Category · Stowage Code	경고: 부식작용하는물질 80 F-A,S-B Alkalis B SW2 Clear of living quarters.
· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따라 벌크 물질 운송	해당사항 없음.

(8 쪽에 계속)

# 물질안전보건자료

## GHS에 따라 라다

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(7 쪽부터 계속)

<b>· 운송/추가정보</b>	
· ADR 한정 <b>수량</b> (수량)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
운송 <b>분류</b> 구분 터널 <b>제한</b> 코드	2 E
<b>· IMDG</b>	
· Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN번호</b>	UN 1760 CORROSIVE LIQUID, N.O.S. ( TRIETHYLENETETRAMINE , TETRAETHYLENEMPENTAMINE), 8, II

### 15 법적 규제 현황

<b>· 산업안전보건법에 의해 규제</b>		
<b>제조제조물질:</b>		
어떠한 내용물도 목록화 되어있지 않다		
<b>· 허가대상물질:</b>		
어떠한 내용물도 목록화 되어있지 않다		
<b>· 관리대상유해물질:</b>		
7440-22-4	silver	
<b>· 작업환경측정 대상 유해인자</b>		
7440-22-4	silver	1B14
<b>· 특수건강 측정 대상 유해인자</b>		
어떠한 내용물도 목록화 되어있지 않다		
<b>해당 해당 수량 또는 혼합물에 대한 안전보건규칙을 적용할 법률</b>		
<b>· Korean Existing Chemical Inventory</b>		
7440-22-4	silver	KE-31261
68410-23-1	Versamid 140 Polyamide Resin	KE-35141
68953-36-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine	KE-16255
112-24-3	3,6-diazaoctanethylenediamin	KE-02911
112-57-2	3,6,9-triazaundecamethylenediamine	KE-01347
<b>· 화학물질관리법</b>		
<b>· 사고대비물질</b>		
어떠한 내용물도 목록화 되어있지 않다		
<b>· 금지물질</b>		
어떠한 내용물도 목록화 되어있지 않다		

(9 쪽에 계속)

# 물질안전보건자료

## GHS에 따라 라다

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(8 쪽부터 계속)

**· 제한물질**

어떠한 내용물도 목록화되어있지않다

**· 유독물질**

어떠한 내용물도 목록화되어있지않다

**· 허가물질**

어떠한 내용물도 목록화되어있지않다

**· 위험물안전관리법 (위험물 및 지정수량) 제 4: 4,000 리터**

**· 등록명목명칭이 아닌 선제대상 화학물질**

어떠한 내용물도 목록화되어있지않다

**· '21년까지 등록하여야 할 압, 들언변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존 화학물질**

어떠한 내용물도 목록화되어있지않다

**· 중점관리물질(양) 지정 지정**

**· 표1 중점관리물질(제관전) 관련 관련**

어떠한 내용물도 목록화되어있지않다

**· 표2 중점관리물질(제관전) 관련 관련**

어떠한 내용물도 목록화되어있지않다

**· 라벨 라벨 라벨 요소**

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

**· 그림문자**



GHS05 GHS07

**· 신호어 위험**

**· 상표상에 명확히 위험성이 표시된 성분:**

- Versamid 140
- Polyamide Resin
- 3,6,9-triazaundecamethylenediamine
- 3,6-diazaoctanethylenediamin

**· 유해 유해 유해 유해 문구**

- 피부에 심한 화상과 눈에 손상을 일으킴
- 알레르기성 피부 반응을 일으킬 수 있음
- 장기적 영향에 의해 수생생물에 유해함

**· 예방 조치 문구 문구**

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.

오염된 의복은 벗고 다시 사용 전 세척하십시오.

밀봉하여 저장하십시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

**· 화학물질 안전성 평가 평가 화학물질 안전성 평가가 수행되지 않음**

KR

(10 쪽에 계속)

# 물질안전보건자료

## GHS에 따라라따

인쇄일자: 2020.08.21

개정: 2020.08.21

**제품명: ETC BOND 556 ACTIVATOR (PART A)**

(9 쪽부터계속)

### 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은  
기술헌하지않았으며계약적인법률관계에기반을두고있지도않다

최초 최초 작성일자: 2020.08.21

개정 개정 개정 수정 최종 개정일자: 1 / 2020.08.21

· 약어와 두문자어:

ADR: Accord européen sur le transport 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

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

KR



# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

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

- **1.1 Identificador del producto**
- **Nombre comercial:** *ETC BOND 556 ACTIVATOR (PART A)*
- **Número del artículo:** 50380-556A
- **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

Skin Corr. 1B      H314 Provoca quemaduras graves en la piel y lesiones oculares graves.  
Eye Dam. 1      H318 Provoca lesiones oculares graves.



GHS07

Skin Sens. 1      H317 Puede provocar una reacción alérgica en la piel.  
Aquatic Chronic 3 H412 Nocivo para los organismos acuáticos, con efectos nocivos duraderos.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**  
El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

( se continua en página 2 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)

( se continua en página 1 )

## · Pictogramas de peligro



GHS05 GHS07

## · Palabra de advertencia Peligro

## · Componentes peligrosos a indicar en el etiquetaje:

3,6,9-triazaundecano-1,11-diamina

3,6-diazaoctano-1,8-diamina trietilentetramina

## · Indicaciones de peligro

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

H317 Puede provocar una reacción alérgica en la piel.

H412 Nocivo para los organismos acuáticos, con efectos nocivos duraderos.

## · 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).

P362+P364 Quitar las prendas contaminadas y lavarlas antes de volver a usarlas.

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

## · 3.2 Caracterización química: Mezclas

· Descripción: Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

## · Componentes peligrosos:

CAS: 68410-23-1	Versamid 140 Polyamide Resin ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315	>10-≤25%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctano-1,8-diamina trietilentetramina ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H312; ⚠ Skin Sens. 1, H317; ⚠ Aquatic Chronic 3, H412	>2,5-≤10%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundecano-1,11-diamina ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; ⚠ Skin Sens. 1, H317	>2,5-≤10%

· Indicaciones adicionales: El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

ES

( se continua en página 3 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)

( se continua en página 2 )

### SECCIÓN 4: Primeros auxilios

#### · 4.1 Descripción de los primeros auxilios

##### · Instrucciones generales:

Quitarse de inmediato toda prenda contaminada con el producto.

Los síntomas de intoxicación pueden presentarse después de muchas horas, por lo que se requiere una supervisión médica durante un mínimo de 48 horas después del accidente.

##### · En caso de inhalación del producto:

Suministrar suficiente aire fresco y, para mayor seguridad, consultar el médico.

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:

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

##### · En caso de ingestión:

Consultar inmediatamente un médico.

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.

### 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:

Al penetrar en las aguas o en el alcantarillado, avisar a las autoridades pertinentes.

Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.

#### · 6.3 Métodos y material de contención y de limpieza:

Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).

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

Asegurar suficiente ventilación /aspiración en el puesto de trabajo.

Evitar la formación de aerosoles.

· **Prevención de incendios y explosiones:** No se requieren medidas especiales.

( se continua en página 4 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

**Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)**

( se continua en página 3 )

- **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

- **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**  
Sin datos adicionales, ver punto 7.
- **8.1 Parámetros de control**
- **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**  
El producto no contiene cantidades relevantes de sustancias con valores límite que exijan un control en el puesto de trabajo.
- **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.  
Lavarse las manos antes de las pausas y al final del trabajo.  
Evitar el contacto con los ojos.  
Evitar el contacto con los ojos y la piel.
- **Protección respiratoria:**  
Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.
- **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. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.
  - **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.

( se continua en página 5 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)

( se continua en página 4 )

· **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:

Pastoso

Color:

Gris plateado

· **Olor:**

Similar al de las aminas

· **Umbral olfativo:**

No determinado.

· **valor pH:**

No determinado.

· **Cambio de estado**

Punto de fusión/punto de congelación:

Indeterminado.

Punto inicial de ebullición e intervalo de ebullición: 333 °C

· **Punto de inflamación:**

163 °C

· **Inflamabilidad (sólido, gas):**

No aplicable.

· **Temperatura de descomposición:**

No determinado.

· **Temperatura de auto-inflamación:**

El producto no es autoinflamable.

· **Propiedades explosivas:**

El producto no es explosivo.

· **Límites de explosión:**

Inferior:

No determinado.

Superior:

No determinado.

· **Presión de vapor:**

No determinado.

· **Densidad:**

Indeterminado.

· **Densidad relativa**

No determinado.

· **Densidad de vapor**

No determinado.

· **Tasa de evaporación:**

No determinado.

· **Solubilidad en / miscibilidad con agua:**

Poco o no mezclable.

· **Coefficiente de reparto: n-octanol/agua:**

No determinado.

· **Viscosidad:**

Dinámica:

No determinado.

Cinemática:

No determinado.

· **Concentración del disolvente:**

VOC (CE)

0,00 %

Contenido de cuerpos sólidos:

0,0 %

· **9.2 Otros datos**

No existen más datos relevantes disponibles.

ES

( se continua en página 6 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)

( se continua en página 5 )

### 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** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

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

#### 112-24-3 3,6-diazaoctano-1,8-diamina trietilentetramina

Oral	LD50	2.500 mg/kg (rat)
Dermal	LD50	805 mg/kg (rabbit)

#### 112-57-2 3,6,9-triazaundecano-1,11-diamina

Dermal	LD50	660 mg/kg (rabbit)
--------	------	--------------------

- **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**  
Puede provocar una reacción alérgica en la piel.
- **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.
- **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.
- **Efectos ecotóxicos:**
- **Observación:** Nocivo para los peces.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 2 (autoclasiificación): peligroso para el agua

( se continua en página 7 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

**Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)**


( se continua en página 6 )

- 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.  
 Una cantidad mínima vertida en el subsuelo ya representa un peligro para el agua potable.  
 nocivo para organismos acuáticos
- **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.

### SECCIÓN 14: Información relativa al transporte

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>· <b>14.1 Número ONU</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p style="text-align: center;">UN1760</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.2 Designación oficial de transporte de las Naciones Unidas</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | <p style="text-align: center;">1760 LÍQUIDO CORROSIVO, N.E.P.<br/>         (TRIELENTETRAMINA, TETRAELENPENTAMINA)<br/>         CORROSIVE LIQUID, N.O.S.<br/>         (TRIETHYLENETETRAMINE,<br/>         TETRAETHYLENEMPENTAMINE)</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.3 Clase(s) de peligro para el transporte</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <div style="text-align: center;">  </div> <p style="text-align: center;">8 Materias corrosivas</p>  |
| <ul style="list-style-type: none"> <li>· <b>Clase</b></li> <li>· <b>Etiqueta</b></li> </ul>   | <p style="text-align: center;">8</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Grupo de embalaje</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p style="text-align: center;">II</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.5 Peligros para el medio ambiente:</b></li> </ul>  | <p style="text-align: center;">No aplicable.</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.6 Precauciones particulares para los usuarios</b></li> <li>· <b>Número de identificación de peligro (Número Kemler):</b></li> <li>· <b>Número EMS:</b></li> <li>· <b>Segregation groups</b></li> <li>· <b>Stowage Category</b></li> <li>· <b>Stowage Code</b></li> </ul> | <p style="text-align: center;">Atención: Materias corrosivas</p> <p style="text-align: center;">80</p> <p style="text-align: center;">F-A,S-B</p> <p style="text-align: center;">Alkalis</p> <p style="text-align: center;">B</p> <p style="text-align: center;">SW2 Clear of living quarters.</p> |
| <ul style="list-style-type: none"> <li>· <b>14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC</b></li> </ul>   | <p style="text-align: center;">No aplicable.</p>   |

( se continua en página 8 )

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 21.08.2020

Revisión: 21.08.2020

Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)

( se continua en página 7 )

· **Transporte/datos adicionales:**

· **ADR**

· **Cantidades limitadas (LQ)**

1L

· **Cantidades exceptuadas (EQ)**

Código: E2

Cantidad neta máxima por envase interior: 30 ml

Cantidad neta máxima por embalaje exterior: 500 ml

· **Categoría de transporte**

2

· **Código de restricción del túnel**

E

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **"Reglamentación Modelo" de la UNECE:**

UN 1760 LÍQUIDO CORROSIVO, N.E.P.  
(TRITILENTETRAMINA, TETRAETILENPENTAMINA),  
8, II

### 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** ninguno de los componentes está incluido en una lista

· **REGLAMENTO (CE) n° 1907/2006 ANEXO XVII** Restricciones: 3

· **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.

· **Frases relevantes**

H302 Nocivo en caso de ingestión.

H312 Nocivo en contacto con la piel.

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

H315 Provoca irritación cutánea.

H317 Puede provocar una reacción alérgica en la piel.

H411 Tóxico para los organismos acuáticos, con efectos nocivos duraderos.

H412 Nocivo para los organismos acuáticos, con efectos nocivos duraderos.

· **Abreviaturas y acrónimos:**

ADR: Accord européen sur le transport 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

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

( se continua en página 9 )



**Ficha de datos de seguridad**  
**según 1907/2006/CE, Artículo 31**

fecha de impresión 21.08.2020

Revisión: 21.08.2020

**Nombre comercial: ETC BOND 556 ACTIVATOR (PART A)**

( se continua en página 8 )

*Acute Tox. 4: Toxicidad aguda - oral – Categoría 4**Skin Corr. 1B: Corrosión o irritación cutáneas – Categoría 1B**Skin Irrit. 2: Corrosión o irritación cutáneas – Categoría 2**Eye Dam. 1: Lesiones oculares graves o irritación ocular – Categoría 1**Skin Sens. 1: Sensibilización cutánea – Categoría 1**Aquatic Chronic 2: Peligroso para el medio ambiente acuático - peligro acuático a largo plazo – Categoría 2**Aquatic Chronic 3: Peligroso para el medio ambiente acuático - peligro acuático a largo plazo – Categoría 3*

ES