Printing date 12/02/2022 Reviewed on 12/02/2022

1 Identification

· Product identifier

· Trade name: HOT MOUNT GREEN RESIN THERMO

· Article number: 1214

· 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: sgkcck@aol.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



GHS08 Health hazard

Sensitization - Respiratory 1A

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.

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



GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

phenol

HMT - Hexamethylenetetramine

· Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dusts or mists.

[In case of inadequate ventilation] wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Get medical advice/attention if you feel unwell.

If experiencing respiratory symptoms: Call a poison center/doctor.

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

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 0 Fire = 3Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable. · **vPvB**: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

| · Dangerous components: | | | |
|-------------------------|------------------------------|-----------|--|
| 100-97-0 | HMT - Hexamethylenetetramine | >2.5-≤10% | |
| 1309-48-4 | magnesium oxide | >2.5-≤10% | |
| 108-95-2 | phenol | ≤2.5% | |

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

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 Not required.

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- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

· 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: | | |
|-----------|------------------------------|-------------------------|
| 100-97-0 | HMT - Hexamethylenetetramine | 55 mg/m³ |
| 1309-48-4 | magnesium oxide | 30 mg/m³ |
| 108-95-2 | phenol | 15 ppm |
| · PAC-2: | | |
| 100-97-0 | HMT - Hexamethylenetetramine | 610 mg/m³ |
| 1309-48-4 | magnesium oxide | 120 mg/m³ |
| 108-95-2 | phenol | 23 ppm |
| · PAC-3: | | |
| 100-97-0 | HMT - Hexamethylenetetramine | 3,600 mg/m ³ |
| 1309-48-4 | magnesium oxide | 730 mg/m³ |
| 108-95-2 | phenol | 200 ррт |

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

- · 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: None.
- · 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:

100-97-0 HMT - Hexamethylenetetramine

TLV Long-term value: 1 mg/m³ *inhalable fraction, A4, DSEN

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1309-48-4 magnesium oxide

PEL Long-term value: 15* mg/m³ fume; *total particulate

TLV Long-term value: 10* mg/m³

108-95-2 phenol

PEL Long-term value: 19 mg/m³, 5 ppm

*as inhalable fraction, A4

Skin

REL Long-term value: 19 mg/m³, 5 ppm

Ceiling limit value: 60* mg/m³, 15.6* ppm

*15-min; Skin

TLV Long-term value: 5 ppm

Skin; BEI, A4

· Ingredients with biological limit values:

108-95-2 phenol

BEI 250 mg/g creatinine

Medium: urine Time: end of shift

Parameter: Phenol with hydrolysis (background, nonspecific)

- · 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.

Wash hands before breaks and at the end of work.

· 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:

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: Not required.

9 Physical and chemical properties

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

Form: Powder
Color: Green

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| | | (Contd. of pag |
|--|---|----------------|
| · Odor: | Phenol-like | |
| · Odor threshold: | Not determined. | |
| · pH-value: | Not applicable. | |
| · Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | Undetermined. | |
| · Flash point: | Not applicable. | |
| · Flammability (solid, gaseous): | Not determined. | |
| · Decomposition temperature: | Not determined. | |
| · Auto igniting: | Product is not selfigniting. | |
| · Danger of explosion: | Product does not present an explosion hazard. | |
| · Explosion limits: | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| · Vapor pressure: | Not applicable. | |
| · Density: | Not determined. | |
| · Relative density | Not determined. | |
| · Vapor density | Not applicable. | |
| · Evaporation rate | Not applicable. | |
| · Solubility in / Miscibility with | | |
| Water: | Soluble. | |
| · Partition coefficient (n-octanol/wat | er): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not applicable. | |
| Kinematic: | Not applicable. | |
| · Solvent content: | | |
| Organic solvents: | 1.0 % | |
| VOC content: | 1.00 % | |
| Solids content: | 100.0 % | |
| · 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.

US

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through inhalation.
- · Additional toxicological information:

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

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

108-95-2 phenol

3

· 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.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

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

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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

- · Uncleaned packagings:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

LIC

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| UN-Number DOT, ADR, IMDG, IATA | Void | |
|---|--------------------------|--|
| UN proper shipping name DOT, ADR, IMDG, IATA | Void | |
| Transport hazard class(es) | | |
| DOT, ADR, ADN, IMDG, IATA Class | Void | |
| Packing group DOT, ADR, IMDG, IATA | Void | |
| Environmental hazards: | Not applicable. | |
| Special precautions for user | Not applicable. | |
| Transport in bulk according to Annex MARPOL73/78 and the IBC Code | II of Not applicable. | |
| UN "Model Regulation": | Void | |

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

| · Section 355 | (extremely | hazardous . | substances): |
|---------------|------------|-------------|--------------|
|---------------|------------|-------------|--------------|

108-95-2 phenol

· Section 313 (Specific toxic chemical listings):

108-95-2 phenol

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

108-95-2 phenol

- · 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)

108-95-2 phenol

DI

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| · TLV (Thre | shold Limit Value) | |
|-------------|--------------------|----|
| 1309-48-4 | magnesium oxide | A4 |
| 108-95-2 | phenol | A4 |

· 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



- · Signal word Danger
- · Hazard-determining components of labeling:

phenol

HMT - Hexamethylenetetramine

· Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Do not breathe dusts or mists.

[In case of inadequate ventilation] wear respiratory protection.

If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Get medical advice/attention if you feel unwell.

If experiencing respiratory symptoms: Call a poison center/doctor.

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

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

16 Other information

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

- · Contact:
- · Date of preparation / last revision 12/02/2022 / -
- · Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

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)

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

BEI: Biological Exposure Limit

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Sensitization - Respiratory 1A: Respiratory sensitisation - Category 1A Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2

TIC