

617H37 - Pedilen Duplicating Foam

Material number 617H37

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1. Product and company identification**Product identifier**

Trade name: 617H37 - Pedilen Duplicating Foam

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

General use: Basic materials for the production of plastic products

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care

Street/POB-No.: 3820 W. Great Lakes Drive

Postal Code, city: Salt Lake City, UT 84120

USA

WWW: www.ottobockus.com

Telephone: +1 (801) 956-2400

Telefax: +1 (801) 956-2401

Dept. responsible for information:

Quality Department,

Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),

Email: USRegulatory@ottobock.com

Additional information:

Corporate headquarters:

Ottobock SE & Co. KGaA

Max-Näder-Straße 15

Duderstadt

Germany

Emergency phone number

CHEMTREC, Telephone: +1 (800) 424-9300

2. Hazards identification**Emergency overview**

Appearance: Form: liquid

Color: colorless

Odor: weak amine odor

Classification: This material is classified as not hazardous.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Composition on the basis of polyether polyol, contains Zeolites (5-10%).

Relevant ingredients:

| CAS No. | Designation | Content | Classification |
|---------------|--|-----------|---|
| CAS 107-21-1 | Ethylene glycol | 1 - 5 % | Acute Toxicity - oral - Category 4. Specific Target Organ Toxicity (Repeated Exposure) - Category 2. |
| CAS 110-63-4 | Butane-1,4-diol | 1 - 5 % | Acute Toxicity - oral - Category 4. Specific Target Organ Toxicity (Single Exposure) - Category 3. |
| CAS 104-19-8 | N,N,4-Trimethylpiperazine-1-ethylamine | 0.1 - 1 % | Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 3. Skin Corrosion - Category 1B. Aquatic toxicity - chronic - Category 3. |
| CAS 3030-47-5 | bis(2-dimethylaminoethyl)(methyl)amine | 0.1 - 1 % | Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 3. Skin Corrosion - Category 1B. |

4. First aid measures

| | |
|-------------------------|---|
| In case of inhalation: | Move victim to fresh air. If you feel unwell, seek medical advice. |
| Following skin contact: | Change contaminated clothing. After contact with skin, wash immediately with soap and plenty of water. In case of skin irritation, consult a physician. |
| After eye contact: | Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an ophthalmologist. |
| After swallowing: | Rinse mouth thoroughly with water. Induce vomiting. Have victim drink large quantities of water, with active charcoal if possible. Seek medical attention. |

Most important symptoms/effects, acute and delayed

In case of ingestion: May cause irritations.
After ingestion of high quantities: vomiting, nausea.
After resorption: Unconsciousness, headache, spasms, amyosthenia, dizziness, CNS disorders.
Absorption can lead to kidney and liver damage.
After contact with skin: mild irritant
After eye contact: May cause irritations.

Information to physician

Treat symptomatically.

5. Fire fighting measures

| | |
|--|---|
| Flash point/flash point range: | > 230 °F |
| Auto-ignition temperature: | No data available |
| Suitable extinguishing media: | Carbon dioxide, foam, dry chemical powder. In case of large fires water spray jet. |
| Extinguishing media which must not be used for safety reasons: | Full water jet |

Specific hazards arising from the chemical

Combustible. In case of fire may be liberated: Nitrogen oxides (NOx), silicon compounds, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus.

Additional information:

Cool exposed containers with water spray.

Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions:

Avoid contact with skin and eyes.

Provide adequate ventilation.

Environmental precautions:

Do not allow to penetrate into soil, waterbodies or drains.

Methods for clean-up:

Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder.

Store in special closed containers and dispose of according to ordinance.

7. Handling and storage

Handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin and eyes.

Precautions against fire and explosion:

When using do not smoke.

Specific use(s)

Basic materials for the production of plastic products

Storage

Requirements for storerooms and containers:

Keep container tightly closed and dry. Keep at temperature not exceeding 122 °F.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

keep away from: Strong acids, strong oxidizing agents, isocyanates.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

| CAS No. | Designation | Type | Limit value |
|----------|-----------------|------------------|----------------------|
| 107-21-1 | Ethylene glycol | USA: ACGIH: STEL | 10 mg/m ³ |
| | | USA: ACGIH: STEL | 50 ppm |
| | | USA: ACGIH: TWA | 25 ppm |

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.

See also information in chapter 7, section storage.

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Personal protection equipment (PPE)

- Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
- Skin protection: Wear suitable protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: nitrile rubber-Layer thickness: $\geq 0,35$ mm
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
- General hygiene considerations:
Avoid contact with skin and eyes.
Change contaminated clothing.
Wash hands before breaks and after work.

9. Physical and chemical properties

Information on basic physical and chemical properties

- Appearance: Form: liquid
Color: colorless
- Odor: weak amine odor
- Odor threshold: No data available
- pH value: strong alkaline
- Melting point/freezing point: No data available
- Initial boiling point and boiling range: No data available
- Flash point/flash point range: > 230 °F
- Evaporation rate: No data available
- Flammability: No data available
- Explosion limits: No data available
- Vapor pressure: at 68 °F: 7 hPa
- Vapor density: No data available
- Density: at 68 °F: 1.06 g/cm³
- Water solubility: miscible
- Partition coefficient: n-octanol/water: No data available
- Auto-ignition temperature: No data available
- Thermal decomposition: No data available
- Ignition temperature: > 734 °F

10. Stability and reactivity

- Reactivity: refer to section 10.3
- Chemical stability: Product is stable under normal storage conditions.
- Possibility of hazardous reactions
No dangerous reactions are known.

Conditions to avoid: Keep away from heat.

Incompatible materials: Strong acids, strong oxidizing agents.
Watch for exothermic reactions with isocyanates.

Hazardous decomposition products:
In case of fire may be liberated: Nitrogen oxides (NOx), silicon compounds, carbon monoxide and carbon dioxide.

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects:

- Acute toxicity (oral): Lack of data.
- Acute toxicity (dermal): Lack of data.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Lack of data.
- Serious eye damage/irritation: Lack of data.
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Lack of data.
- Germ cell mutagenicity/Genotoxicity: Lack of data.
- Carcinogenicity: Lack of data.
- Reproductive toxicity: Lack of data.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Lack of data.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Lack of data.

Symptoms

- In case of ingestion: May cause irritations.
- After ingestion of high quantities: vomiting, nausea.
- After resorption: Unconsciousness, headache, spasms, amyosthenia, dizziness, CNS disorders.
- Absorption can lead to kidney and liver damage.
- After contact with skin: mild irritant
- After eye contact: May cause irritations.

General remarks

- Information about N,N,4-Trimethylpiperazine-1-ethylamine:
LD50 Rat, oral 1260 mg/kg
LD50 Rabbit, dermal 346 mg/kg
- Information about bis(2-dimethylaminoethyl)(methyl)amine:
LD50 Rat, oral 1330 mg/kg
LD50 Rabbit, dermal 230 mg/kg

12. Ecological information

Ecotoxicity

Aquatic toxicity: Information about (polyether polyol):
 Daphnia toxicity: EC50 Daphnia magna: 139 mg/L
 Fish toxicity: LC50 Leuciscus idus: >100 mg/L/ 48 h

Mobility in soil

No data available

Persistence and degradability

Further details: Information about (polyether polyol):
 Biodegradation: 54 %/ 28 d.
 Product is not readily biodegradable.

Additional ecological information

Volatile organic compounds (VOC):
 85.8 % by weight
 General information: Do not allow to penetrate into soil, waterbodies or drains.

13. Disposal considerations

Product

Recommendation: Incinerate according to applicable local, state and federal regulations.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.
 Non-contaminated packages may be recycled.

14. Transport information

USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

Sea transport (IMDG)

Proper shipping name: Not restricted

Marine pollutant: no

Air transport (IATA)

Proper shipping name: Not restricted

Further information

No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - U.S. Federal Regulations

Ethylene glycol: TSCA Inventory: listed; EPA flags T
 TSCA HPVC: not listed
 Clean Air Act:
 Hazardous Air Pollutants: Code XOY
 SOCOMI Chemical: yes
 Other Environmental Laws:
 CERCLA: RQ 5000 lbs.
 SARA Title III Section 313, Toxic Release: Conc. 1.0% /
 Threshold Standard
 NIOSH Recommendations:
 Occupational Health Guideline: 0272

Butane-1,4-diol: TSCA Inventory: listed
 TSCA HPVC: not listed
 Clean Air Act:
 SOCOMI Chemical: yes

N,N,4-Trimethylpiperazine-1-ethylamine: TSCA: listed

bis(2-dimethylaminoethyl)(methyl) amine: TSCA Inventory: listed
 TSCA HPVC: not listed

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Text for labeling: Safety data sheet available on request.

Hazard rating systems: NFPA Hazard Rating:
 Health: 1 (Slight)
 Fire: 1 (Slight)
 Reactivity: 0 (Minimal)



HMIS Version III Rating:
 Health: 1 (Slight)
 Flammability: 1 (Slight)
 Physical Hazard: 0 (Minimal)
 Personal Protection: X = Consult your supervisor

| | |
|-----------------|---|
| HEALTH | 1 |
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |
| X | |

Reason of change: Changes in section 1.3: Corporate headquarters

Date of first version: 10/7/1994

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.