

1. Product and company identification

Product identifier

Trade name: 617H37 - Pedilen Duplicating Foam

Recommended use and restrictions on use

General use: Basic materials for the production of plastic products

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal Code, city: Burlington, ON L7L 5N5, CA
Canada

WWW: www.ottobock.ca

E-mail: info.canada@ottobock.com

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany

Emergency phone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

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 WHMIS in Canada.

Hazards not otherwise classified

see section 11: Toxicological information

3. Composition / Information on ingredients

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

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 107-21-1	Ethylene glycol	1 - 5 %	Acute Toxicity 4 (oral). Specific Target Organ Toxicity (Repeated Exposure) 2.
CAS 110-63-4	Butane-1,4-diol	1 - 5 %	Acute Toxicity 4 (oral). Specific Target Organ Toxicity (Single Exposure) 3.
CAS 104-19-8	N,N,4-Trimethylpiperazine-1-ethylamine	0.1 - 1 %	Acute Toxicity 4 (oral). Acute Toxicity 3 (dermal). Skin Corrosion 1B. Aquatic toxicity - chronic 3.
CAS 3030-47-5	bis(2-dimethylaminoethyl)(methyl)amine	0.1 - 1 %	Acute Toxicity 4 (oral). Acute Toxicity 3 (dermal). Skin Corrosion 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 and effects, both 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:	> 110 °C
Auto-ignition temperature:	No data available
Suitable extinguishing media:	Carbon dioxide, foam, extinguishing 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 (NO_x), silicon compounds, carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters:

Wear self-contained breathing apparatus.

Additional information:

Use fine water spray to cool endangered containers.

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, siliceous 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 50 °C.

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	Canada: OEL Ceiling	100 mg/m ³ (Aerosol)
		Canada: OEL Ceiling	100 mg/m ³
		Canada: OEL Ceiling	50 ppm (vapor)
		Canada: OEL STEL	20 mg/m ³ (Aerosol)
		Canada: OEL TWA	10 mg/m ³ (Aerosol)
		Canada: Plafond	127 mg/m ³ ; 50 ppm
		USA: ACGIH: STEL	10 mg/m ³ (inhalable fraction Aerosol)
		USA: ACGIH: STEL	50 ppm (vapor)
		USA: ACGIH: TWA	25 ppm (vapor)

Engineering controls

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

See also information in chapter 7, section storage.

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.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

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:	strong alkaline
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	> 110 °C
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	at 20 °C: 7 hPa
Vapor density:	No data available
Density:	at 20 °C: 1.06 g/cm^3
Water solubility:	miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Ignition temperature:	> 390 °C

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 (NO _x), 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.	
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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.

Package

Recommendation:

Dispose of waste according to applicable legislation.

Non-contaminated packages may be recycled.

14. Transport information

UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

Environmental hazards

Marine pollutant:

no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

USA: Department of Transportation (DOT)

Proper shipping name:

Not restricted

Canada: Transportation of Dangerous Goods (TDG)

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 - Canada

Ethylene glycol:

DSL: listed

Butane-1,4-diol:

DSL: listed

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

bis(2-dimethylaminoethyl)(methyl)amine: DSL: listed

National regulations - U.S. Federal Regulations

Ethylene glycol: TSCA Inventory: listed
Clean Air Act:
CAA Hazardous Air Pollutants: yes
CAA SOCM 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
Clean Air Act:
CAA SOCM Chemical: yes

N,N,4-Trimethylpiperazine-1-ethylamine: TSCA Inventory: listed
bis(2-dimethylaminoethyl)(methyl)amine: TSCA Inventory: listed

National regulations - U.S. State Regulations

Ethylene glycol: California Proposition 65: developmental

16. Other information

Text for labeling:

Hazard rating systems:



Safety data sheet available on request.

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

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic
 AS/NZS: Australian Standards/New Zealand Standards
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 CNS: Central Nervous System
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 EC: European Community
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 IATA: International Air Transport Association
 IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
 IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IMDG Code: International Maritime Dangerous Goods Code
 IMO: International Maritime Organization
 LC50: Median lethal concentration
 LD50: Lethal dose 50%
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 MFSU: Manufacture, formulation, supply and use
 OEL: Occupational Exposure Limit Value
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 Skin Corrosion: Skin corrosion
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit
 WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 1.3: Company/undertaking identification

Date of first version: 7/10/1994

Department issuing data sheet

Contact person: see section 1: Department 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.