

1. Identification

Product identifier

Trade name: 636W23-H - UHU PLUS Hardener

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

General use: Adhesive
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care
Street/POB-No.: 3820 W. Great Lakes Drive
Zip code, city: Salt Lake City, UT 84120
USA
WWW: www.ottobockus.com
Telephone: +1 (801) 956-2400
Telefax: +1 (801) 956-2401
Department 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 telephone number

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

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

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

2. Hazard identification

Classification of the substance or mixture

Skin Corrosion - Category 1B Causes severe skin burns and eye damage.
Eye Damage - Category 1 Causes serious eye damage.
Sensitization - skin - Category 1 May cause an allergic skin reaction.

Label elements

Symbols:



Signal word: **Danger**

Hazard statements: Causes severe skin burns and eye damage.
May cause an allergic skin reaction.

Precautionary statements:

Do not breathe mist/vapors/spray.
Wash hands and face thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
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.
Take off contaminated clothing and wash it before reuse.

Other hazards

Special danger of slipping by leaking/spilling product.

3. Composition/information on ingredients

Mixtures

Chemical characterization: Mixture of the substances listed below with non-hazardous additions

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 10563-29-8	N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine	2.5 - 10 %	Acute Toxicity - oral - Category 4. Skin Corrosion - Category 1B. Sensitization - skin - Category 1B.
CAS 90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	3 - 5 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B. Eye Damage - Category 1. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 3.

The actual concentration or concentration range is withheld as a trade secret.

4. First aid measures

General information:	First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand. Take off immediately all contaminated clothing and wash it before reuse.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention.
Following skin contact:	After contact with skin, wash immediately with soap and plenty of water. Immediately get medical attention.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek the attention of an ophthalmologist immediately.
After swallowing:	Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately get medical attention.

Most important symptoms/effects, acute and delayed

Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Information to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Extinguishing is to be in accordance with the surrounding fire.
Water spray jet, foam, dry chemical powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet.

Specific hazards arising from the chemical

On heating or in case of fire toxic gases may form.
In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters

Use a breathing apparatus independent of the ambient air (isolated apparatus) and a full protection outfit (suit) against chemicals.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. If possible, eliminate leakage.
Do not breathe mist/vapors/spray. Avoid contact with the substance. Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse. Keep unprotected people away.

Environmental precautions:

Do not allow to enter into surface water or drains.
If necessary, notify appropriate authorities.

Methods and material for containment and cleaning up

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.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).
Never return spills in original containers for re-use.

7. Handling and storage

Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep only in the original container in a cool, well-ventilated place.
Keep container tightly closed. Protect from excessive heat.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
90640-67-8	Amines, polyethylenepoly, triethylenetetramine fraction	USA: ACGIH: TWA	4.2 mg/m ³ ; 1 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	4 mg/m ³ ; 1 ppm (may be absorbed through the skin)

Appropriate engineering controls

Make sure there is sufficient air exchange and / or that working rooms are air suctioned.

Personal protection equipment (PPE)

Respiratory protection: Not necessary, if the room is well-ventilated.
In case of inadequate ventilation wear respiratory protection. Wear half-mask respirator with combination filter for organic vapors and particles. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

Hand protection: Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
permanent contact, Glove material: butyl caoutchouc (butyl rubber), ethylene vinyl alcohol laminate (EVAL)
Layer thickness: 0.7 mm
Breakthrough time: >480 min.
During splash contact, Glove material: Neoprene, butyl caoutchouc (butyl rubber)
Breakthrough time: 10 - 480 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

General hygiene considerations:

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state at 68 °F and 101.3 kPa	liquid
Color:	yellow
Odor:	amine odor
Odor threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	approx. 532.4 °F
Flammability:	Not applicable
Explosion limits:	No data available
Flash point/flash point range:	> 212 °F
Evaporation rate:	No data available
Auto-ignition temperature:	not self-igniting
Decomposition temperature:	No data available
pH:	No data available
Dynamic viscosity:	at 68 °F: 32,500 mPa*s
Water solubility:	at 68 °F: immiscible
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	at 68 °F: 0.95 g/mL
Vapor density:	No data available
Particle characteristics:	Not applicable

Additional information

Explosive properties:	Product is not explosive.
Solid content:	84.2 %

10. Stability and reactivity

Reactivity:	Stable under recommended storage conditions.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No dangerous reactions are known.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight.

Incompatible materials: None known

Hazardous decomposition products:
No decomposition when used properly.

11. Toxicological information

Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Skin Corrosion -
Category 1B = Causes severe skin burns and eye damage.

Serious eye damage/irritation: Eye Damage - Category 1 = Causes serious eye damage.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: 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.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information: Information about: Amines, polyethylenepoly-, triethylenetetramine fraction:
LD50, Rat: 1,716 (OECD 401)
LD50, Rabbit: 1,465 (OECD 402)

Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12. Ecological information

Ecotoxicity

Further details: No data available

Persistence and degradability

Further details: No data available

Bioaccumulative potential

Partition coefficient: n-octanol/water:
No data available

Mobility in soil

No data available

Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.
Avoid spills and leaks. Very small amounts contaminates drinking water.
Do not release undiluted and unneutralized to the sewer.

13. Disposal considerations

Waste treatment methods

Product

Recommendation: Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

14. Transport information

UN number

DOT: UN2735
IMDG, IATA-DGR: UN 2735

UN proper shipping name

DOT, IMDG, IATA-DGR: UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Amines, polyethylenepoly-, triethylenetetramine fraction;
N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine)

Transport hazard class(es)

DOT: 8
IMDG: Class 8, Subrisk -
IATA-DGR: Class 8

Packing group

DOT, IMDG, IATA-DGR: III

Environmental hazards

Marine pollutant: no

Transport in bulk according to IMO instruments

No data available



Special precautions for user

USA: Department of Transportation (DOT)

Labels:	8
Symbols:	G
Special Provisions:	IB3, T7, TP1, TP28
Packaging – Exceptions:	154
Packaging – Non-bulk:	203
Packaging – Bulk:	241
Quantity limitations – Passenger aircraft / rail:	5 L
Quantity limitations – Cargo only:	60 L
Vessel stowage – Location:	A
Vessel stowage – Other:	52

Sea transport (IMDG)

EmS:	F-A, S-B
Special Provisions:	223 274
Limited quantities:	5 L
Excepted quantities:	E1
Package - Instructions:	P001, LP01
Package - Provisions:	-
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T7
Tank instructions - Provisions:	TP1, TP28
Stowage and handling:	Category A.
Segregation:	SG35
Properties and observations:	Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. React violently with acids. Cause burns to skin, eyes and mucous membranes.
Marine pollutant:	no
Segregation group:	18

Air transport (IATA)

Proper shipping name:	UN 2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Amines, polyethylenepoly-, triethylenetetramine fraction; N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine)
Hazard label:	Corrosive
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y841 - Max. Net Qty/Pkg. 1 L
Passenger and Cargo Aircraft:	Pack.Instr. 852 - Max. Net Qty/Pkg. 5 L
Cargo Aircraft only:	Pack.Instr. 856 - Max. Net Qty/Pkg. 60 L
Special Provisions:	A3 A803
Emergency Response Guide-Code (ERG):	8L

15. Regulatory information

National regulations - U.S. Federal Regulations

N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine: TSCA Inventory: listed

National regulations - U.S. State Regulations

No data available

Further regulations, limitations and legal requirements

No data available

16. Other information

Text for labeling: Contains 2.5 - 10 % N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine, 3 - 5 % Amines, polyethylenepoly-, triethylenetetramine fraction.

Revision date: 11/28/2025

Date of first version: 9/29/1994

Reason of change: General revision: Safety Data Sheet according to HCS 2024 (29 CFR 1910.1200)

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
 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
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 DOT: Department of Transportation's Safety Regulations (USA)
 EC: European Community
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 Eye Damage: Eye damage
 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
 LD50: Lethal dose 50%
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 Sensitization - skin: Skin sensitisation
 Skin Corrosion: Skin corrosion
 TRGS: Technical Rules for Hazardous Substances
 UN: United Nations
 vPvB: Very persistent and very bioaccumulative

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.