

1. Product and company identification

Product identifier

Trade name: 636W23-H - UHU PLUS Hardener

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

General use: Hardener for 2 component adhesive For orthopedic procedures.
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
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: yellow

Odor: amine odor

Classification: Skin Corrosion - Category 1B; Sensitization - skin - Category 1;

Hazard symbols:



Signal word: **Danger**

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

Precautionary statements:

Do not breathe fume/gas/mist/vapors/spray.
 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 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.
 Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is 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: Solvent free adhesive with polyaminoamide base

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 10563-29-8	N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine	2.5 - 10 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Skin Corrosion - Category 1B. Sensitization - skin - Category 1.

4. First aid measures

General information: Take off immediately all contaminated clothing.
 In case of inhalation: Provide fresh air. Seek medical attention if problems persist.
 Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Seek medical attention if irritation persists.
 After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.
 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

Flash point/flash point range:

230 °F (DIN 51755)

Auto-ignition temperature: not self-igniting

Suitable extinguishing media:

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:

Wear self-contained breathing apparatus and protective clothing to protect skin and eyes.

6. Accidental release measures

Personal precautions: Provide adequate ventilation. Do not breathe vapor or spray.
Avoid contact with skin and eyes. Suitable protective clothing.

Environmental precautions:

Do not allow to enter into surface water 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: Make sure there is sufficient air exchange and / or that working rooms are air suctioned.
Do not breathe vapor or spray. Avoid contact with skin and eyes. Suitable protective clothing.

Specific use(s) Hardener for 2 component adhesive For orthopedic procedures.

Storage

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

Engineering controls

Make sure there is sufficient air exchange and / or that working rooms are air suctioned.
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: protective gloves according to OSHA Standard - 29 CFR: 1910.138.
 Glove material: rubber-Breakthrough time 480 min.
 Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: If necessary: Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations:
 Do not breathe vapor or spray. Avoid contact with skin and eyes.
 Keep away from food, drink and animal feedingstuffs.
 Wash hands before breaks and after work.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: liquid Color: yellow
Odor:	amine odor
Odor threshold:	No data available
pH value:	at 68 °F, 50%: 12
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 392 °F
Flash point/flash point range:	230 °F (DIN 51755)
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	at 68 °F: 4 hPa (DIN 51754)
Vapor density:	No data available
Density:	at 68 °F: 0.95 g/mL (DIN 51757)
Water solubility:	at 68 °F: immiscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not self-igniting
Thermal decomposition:	No data available
Viscosity, dynamic:	at 68 °F: 32500 mPa*s
Explosive properties:	Product is not explosive.
Ignition temperature:	> 572 °F (DIN 51794)
Solid content:	100 %

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: Protect from excessive heat.

Incompatible materials: None known

636W23-H - UHU PLUS Hardener

Material number 636W23-H

Page: 5 of 7

Hazardous decomposition products:

On heating or in case of fire toxic gases may form.
In case of fire may be liberated: nitrogen oxides (NOx), 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: Skin Corrosion -
Category 1B = Causes severe skin burns and eye damage.
Serious eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.
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.

12. Ecological information**Ecotoxicity**

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

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

13. Disposal considerations**Product**

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

Contaminated packaging

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

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

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

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Follow use instructions on the label.

Text for labeling: Contains 2.5 - 10 % N'-(3-Aminopropyl)-N,N-dimethylpropane-1,3-diamine. Safety data sheet available on request.

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

Reason of change: Changes in section 1.3: Corporate headquarters

Date of first version: 9/29/1994

Department issuing data sheet

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



SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

636W23-H - UHU PLUS Hardener

Material number 636W23-H

Revision date: 3/22/2018

Version: 9

Language: en-US

Date of print: 5/24/2018

Page: 7 of 7

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.