

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

Revision date: 3/22/2018 Version: 9 Language: en-US Date of print: 5/24/2018

636W23-H - UHU PLUS Hardener

Material number 636W23-H

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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 amine odor

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

Hazard symbols:

Odor:

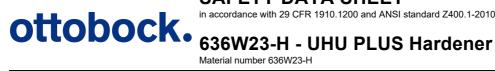




Signal word: Danger

Hazard statements: Causes severe skin burns and eye damage.

May cause an allergic skin reaction.



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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.

After contact with skin, wash immediately with soap and plenty of water. Following skin contact:

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

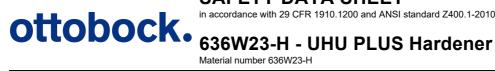
Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Information to physician

Treat symptomatically.

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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 (NOx), 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.

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

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

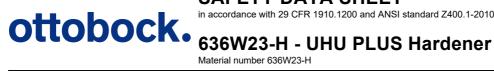
Engineering controls

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.



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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.

If necessary: Use filter type A (= against vapors of organic substances) according to Respiratory protection:

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

amine odor Odor: Odor threshold: No data available

pH value: at 68 °F, 50%: 12 Melting point/freezing point: No data available

> 392 °F Initial boiling point and boiling range:

Flash point/flash point range: 230 °F (DIN 51755) Evaporation rate: No data available Flammability: No data available **Explosion limits:** No data available

at 68 °F: 4 hPa (DIN 51754) Vapor pressure:

Vapor density: No data available

Density: at 68 °F: 0.95 g/mL (DIN 51757)

at 68 °F: immiscible Water solubility: Partition coefficient: n-octanol/water: No data available Auto-ignition temperature: not self-igniting No data available Thermal decomposition:

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

refer to section 10.3 Reactivity:

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



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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):

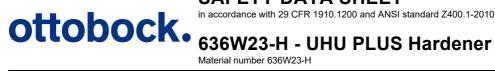
0 % by weight

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.



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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)

Not restricted Proper shipping name:

Marine pollutant: nο

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.

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

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

Reason of change: Changes in section 1.3: Corporate headquarters

9/29/1994 Date of first version:

Department issuing data sheet

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





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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.

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