

1. Product and company identification

Product identifier

Trade name: 636W112- Pattex Repair Externe

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

General use: 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

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 phone 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. Hazards identification

Emergency overview

Appearance: Form: liquid, viscous
Color: colorless, clear

Odor: odorless

Classification: This material is classified as not hazardous.

Precautionary statements:

If skin irritation or rash occurs: Get medical advice/attention.

Regulatory status

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

Hazards not otherwise classified

With exposure to moisture, product will release methanol.

Methanol: Toxic by inhalation, in contact with skin and if swallowed.

see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 2768-02-7	Trimethoxyvinylsilane	< 10 %	Flammable Liquid - Category 3. Acute Toxicity - inhalative - Category 4.
CAS 1760-24-3	N-(3-(Trimethoxysilyl)propyl) ethylenediamine	< 1 %	Acute Toxicity - inhalative - Category 4. Eye Damage - Category 1. Sensitization - skin - Category 1.

Additional information: With exposure to moisture, product will release methanol.
Exposure limit values refer to section 8.

4. First aid measures

In case of inhalation: Move victim to fresh air.
If the casualty has difficulty breathing, call a doctor immediately.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water.
Change contaminated clothing.
If skin irritation or rash occurs: Get medical advice/attention.

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 with water. Drink one or two glasses of water. Seek medical attention.
Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Mild irritant.
In case of prolonged or frequently repeated skin contact: May cause allergies in rare instances.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

165.2 °F

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, foam, dry chemical powder, carbon dioxide (CO2).

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: Silicon dioxide, Nitrogen oxides (NOx), Carbon monoxide and carbon dioxide (CO2).

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus. Wear personal protection equipment.

Additional information:

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

6. Accidental release measures

Personal precautions:	Provide adequate ventilation, and local exhaust as needed. Wear protective equipment. Avoid contact with skin and eyes. Do not breathe vapors. Remove all sources of ignition.
Environmental precautions:	Do not allow to penetrate into soil, waterbodies or drains.
Methods for clean-up:	Take up mechanically, placing in appropriate containers for disposal.
Additional information:	Special danger of slipping by leaking/spilling product.

7. Handling and storage

Handling

Advices on safe handling:	Provide adequate ventilation, and local exhaust as needed. Wear protective equipment. Avoid contact with skin and eyes. Do not breathe vapors. When using do not eat, drink or smoke. Wash hands before breaks and after work.
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Specific use(s)	Reaction adhesives
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Storage

Requirements for storerooms and containers:	Store container tightly closed in a dry area. Protect from humidity and water. Protect from frost. Storage temperature: 41 - 95 °F.
Hints on joint storage:	Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-56-1	Methanol	USA: ACGIH: STEL	328 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		USA: ACGIH: TWA	262 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		USA: IDLH: TWA	6,000 ppm
		USA: NIOSH: STEL	325 mg/m ³ ; 250 ppm (may be absorbed through the skin)
		USA: NIOSH: TWA	260 mg/m ³ ; 200 ppm (may be absorbed through the skin)
		USA: OSHA: TWA	260 mg/m ³ ; 200 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-56-1	Methanol	USA: ACGIH-BEI, urine	15 mg/L	Methanol	end of exposure or end of shift

Engineering controls

Provide adequate ventilation, and local exhaust as needed.

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.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: When vapors form, use respiratory protection.
Use filter type AX (= against vapors of low boiling organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations:

Avoid contact with skin and eyes. Do not breathe vapors.

When using do not eat, drink or smoke. Wash hands before breaks and after work.

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, viscous Color: colorless, clear
Odor:	odorless
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	165.2 °F
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): 1.40 Vol-% UEL (Upper Explosive Limit): 50.00 Vol-%
Vapor pressure:	No data available
Vapor density:	No data available
Density:	1.10 g/cm³
Solubility:	No data available
Partition coefficient: n-octanol/water:	(N-(3-(Trimethoxysilyl)propyl)ethylenediamine) -1.67 log P(o/w) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Thermal decomposition:	While curing will be generated: Methanol
Viscosity, dynamic:	150,000 - 250,000 mPa*s

10. Stability and reactivity

Reactivity:	Moisture-sensitive. With exposure to moisture, product will release methanol.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Non, if handled and stored appropriately.
Conditions to avoid:	Protect from moisture contamination. Excessive heating.
Incompatible materials:	Water, humidity
Hazardous decomposition products:	In case of fire may be liberated: Silicon dioxide, Nitrogen oxides (NOx), Carbon monoxide and carbon dioxide (CO2).
Thermal decomposition:	While curing will be generated: Methanol

11. Toxicological information

Toxicological tests

<div> Toxicological effects: </div>	<div> 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. </div>
<div> Other information: </div>	<div> Trimethoxyvinylsilane: LD50 Rat, oral: 7120 mg/kg LD50 Rabbit, dermal: 3434 mg/kg LC50 Rat, inhalative 16 mg/L/4h LC50 Rat, inhalative 2714 ppm/4h With exposure to moisture, product will release methanol. Methanol: Toxic by inhalation, in contact with skin and if swallowed. </div>

Symptoms

In case of inhalation: Potential health effects.

In case of ingestion: Swallowing may cause gastrointestinal irritation and pain of guts.

After contact with skin:

Mild irritant. In case of prolonged or frequently repeated skin contact: May cause allergies in rare instances.

After eye contact: Mild irritant.

Symptoms: Conjunctival redness

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Trimethoxyvinylsilane:

Fish toxicity: LC50 Oncorhynchus mykiss: 191 mg/L/96h. (OECD 203)

Daphnia toxicity: EC50 Daphnia magna (Big water flea): >100 mg/L/48h (OECD 202)

Algae toxicity: IC50 >100 mg/L/72h (OECD 201)

Mobility in soil

No data available

Persistence and degradability

Further details:

No data available

Additional ecological information

Volatile organic compounds (VOC):

0.11 % by weight / 1.12 g/L

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:

Recycle only completely emptied packaging.

If recycling is not practicable, dispose of in compliance with local regulations.

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)

Identification number: UN1133
 Proper shipping name: UN 1133, ADHESIVES
 Hazard class or Division: 3
 Packing Group: III
 Labels: 3
 Special Provisions: B1, B52, IB3, T2, TP1
 Packaging – Exceptions: 150
 Packaging – Non-bulk: 173
 Packaging – Bulk: 242
 Quantity limitations – Passenger aircraft / rail: 60 L
 Quantity limitations – Cargo only: 220 L
 Vessel stowage – Location: A
 Vessel stowage – Other:



Sea transport (IMDG)

Proper shipping name:: Not restricted
 Marine pollutant: no

Air transport (IATA)

Proper shipping name:: Not restricted

15. Regulatory information

National regulations - U.S. Federal Regulations

Product: Import Certification, Positive Certification:
All chemical substances in this product comply with all applicable rules or orders under TSCA and there isn't a chemical substance offered for entry in violation of TSCA or any applicable rule or order thereunder.

Methanol: Clean Air Act:
CAA Hazardous Air Pollutants: yes
CAA SOCM Chemical: yes

Other Environmental Laws:
CERCLA: RQ 5000 lbs.
RCRA Hazardous Wastes: Code U154
SARA Title III - Section 313, Toxic Release: Conc. 1.0% / Threshold Standard

NIOSH Recommendations:
Occupational Health Guideline: 0397

National regulations - U.S. State Regulations

Methanol: California Proposition 65: developmental

Delaware Air Quality Management List:
DRQ: 5000 - RQ State: Federal Regulations Apply

Idaho Air Pollutant List:
Title 585: AAC: 13 - EL: 17,3 - OEL: 260 - Title 586: -

Main Hazardous Air Pollutants:
Me 2005: HAP - Hap Rpt: 2000

Massachusetts Haz. Substance codes: 2,4,5,6 F8 F9

Minnesota Haz. Substance:
Codes: ANO - Ratings: 7,5 - Status: Air Pollutant Title III. TRI.

New Jersey RTK Hazardous Substance:
DOT: 1230 - Sub No.: 1222 - TPQ: -

New York List of Hazardous Substances:
RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.

Pennsylvania Haz. Substance code: E

Washington Air Contaminant:
TWA: 200 ppm - 260 mg - STEL: 250 ppm - 325 mg
Skin: Protective measures should be taken to prevent or reduce skin absorption.

National regulations - Canada

Methanol: DSL: listed

National regulations - Great Britain

Hazchem-Code: -

16. Other information

Text for labeling: Contains N-(3-(Trimethoxysilyl)propyl)ethylenediamine: May produce an allergic reaction.
With exposure to moisture, product will release methanol.
Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 2 (Moderate)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 2 (Moderate)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	2
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

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

EC: European Community

EC50: Effective Concentration 50%

EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods

EN: European Standard

EQ: Excepted quantities

Eye Damage: Eye damage

Flammable Liquid: Flammable liquid

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

IC50: Inhibition Concentration 50%

IMDG Code: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

LC50: Median lethal concentration

LD50: Lethal dose 50%

LEL: Lower Explosion Limit

log P(o/w): Partition coefficient: octanol/water

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

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

Sensitization - skin: Skin sensitisation

TRGS: Technical Rules for Hazardous Substances

UN: United Nations

vPvB: Very persistent and very bioaccumulative

Reason of change:

General revision

Date of first version:

10/16/2013

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.