

1. Product and company identification

Product identifier

Trade name: 636W28=A - Special Glue Part A

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

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

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

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

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid

Color: white

Odor: weakly aromatic

Classification: Skin Irritation - Category 2; Eye Irritation - Category 2A; Sensitization - skin - Category 1; Aquatic toxicity - chronic - Category 2;

Hazard symbols:



Signal word: **Warning**

Hazard statements: Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Toxic to aquatic life with long lasting effects.

Precautionary statements: Avoid release to the environment.
Wear protective gloves and eye protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation or rash occurs: Get medical advice/attention.
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

Special danger of slipping by leaking/spilling product.
People who suffer from skins problems, asthma, allergies, chronic or recurring respiratory illnesses must not be deployed in processes, which use this substance.
see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 25068-38-6	Bisphenol A epoxy resin (molecular-weight < 700)	60 - 100 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.

4. First aid measures

General information: If medical advice is needed, have product container or label at hand.
First aider: Pay attention to self-protection!

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Seek medical attention.

Following skin contact: Take off immediately all contaminated clothing and wash it before reuse. Wash with generous amount of water and soap. In case of skin reactions, consult a physician.

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. Subsequently consult an ophthalmologist.

After swallowing: Do not induce vomiting. Consult physician.
Never give anything by mouth to an unconscious person.
Rinse mouth and drink large quantities of water.

Most important symptoms/effects, acute and delayed

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.
Symptoms: Reddening, causes tears.

Information to physician

Treat symptomatically. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

5. Fire fighting measures

Flash point/flash point range:

> 300.2 °F (c.c.)

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, dry chemical powder, carbon dioxide, sand.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

In case of fire may be liberated: halogenated compounds, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Water spray/stream may be used to extinguish area fires and to cool endangered containers.

Do not allow water used to extinguish fire to enter drains, ground or waterways.

6. Accidental release measures

Personal precautions:

Wear appropriate protective equipment. Keep unprotected people away. Avoid contact with skin, eyes, and clothing. Do not breathe vapor or spray. Provide adequate ventilation. Take off immediately all contaminated clothing and wash it before reuse.

Environmental precautions:

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

Methods for clean-up:

Keep upwind. Stop leak if safe to do so. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

7. Handling and storage

Handling

Advices on safe handling: Provide good ventilation and/or an exhaust system in the work area.

Avoid contact with skin, eyes, and clothing. Do not breathe vapor or spray.

Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

People who suffer from skins problems, asthma, allergies, chronic or recurring respiratory illnesses must not be deployed in processes, which use this substance.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

Storage

Requirements for storerooms and containers:

storage temperature 35.6 - 104 °F Keep only in the original container. Protect from direct sunlight. Store containers in upright position. Keep container tightly closed and dry. Keep in a cool place.

Hints on joint storage:

Avoid contact with strong acids, strong bases and strong oxidizing agents. Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Engineering controls

Use only explosion-protected equipment/instruments.

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

Closed work clothing

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Glove material: butyl caoutchouc (butyl rubber), ethylene vinyl alcohol laminate (EVAL).

Breakthrough time: >480 min. During splash contact: Nitrile rubber, Neoprene.

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

Respiratory protection:

Use respiratory protection whenever ventilation is inadequate.

If necessary: Use filter type A-P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations:

Avoid contact with skin, eyes, and clothing.

Wash hands before breaks and after work.

Do not breathe vapor or spray.

Keep away from food, drink and animal feedingstuffs.

Take off immediately all contaminated clothing and wash it before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:

Physical state at 68 °F and 101.3 kPa: liquid

Color: white

Odor:

weakly aromatic

Odor threshold:

No data available

pH value:

at 50%: 6

Melting point/freezing point:

No data available

Initial boiling point and boiling range:

> 392 °F

Flash point/flash point range:

> 300.2 °F (c.c.)

Evaporation rate:

No data available

Flammability:

No data available

Explosion limits:

No data available

Vapor pressure:

No data available

Vapor density:	No data available
Density:	(Relative density) 1.4 g/mL
Water solubility:	at 68 °F: insoluble
Partition coefficient: n-octanol/water:	3.242 log P(o/w) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Thermal decomposition:	> 200°C
Viscosity, dynamic:	at 77 °F: 20 - 40 mPa*s

10. Stability and reactivity

Reactivity:	Refer to subsection "Possibility of hazardous reactions".
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	No particular hazards known.
Conditions to avoid:	Protect from direct sunlight. Keep away from heat.
Incompatible materials:	Avoid contact with strong acids, strong bases and strong oxidizing agents.
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.
Thermal decomposition:	> 200°C

11. Toxicological information

Toxicological tests

<p>Toxicological effects:</p>	<p>The statements are derived from the properties of the single components. No toxicological data is available for the product as such.</p> <p>Acute toxicity (oral): Lack of data.</p> <p>Acute toxicity (dermal): Lack of data.</p> <p>Acute toxicity (inhalative): Lack of data.</p> <p>Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.</p> <p>Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.</p> <p>Sensitisation to the respiratory tract: Lack of data.</p> <p>Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.</p> <p>Germ cell mutagenicity/Genotoxicity: Inconclusive data.</p> <p>Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)</p> <p>OECD 471 (Ames test): positive</p> <p>OECD 478 (Rodent Dominant Lethal Test): negative</p> <p>Carcinogenicity: Based on available data, the classification criteria are not met.</p> <p>Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)</p> <p>OECD 453 (Rat, oral): negative</p> <p>OECD 453 (Mouse, dermal): negative</p> <p>Reproductive toxicity: Based on available data, the classification criteria are not met.</p> <p>Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)</p> <p>OECD 416 (Rat, oral): NOEL = 540 mg/kg</p> <p>OECD 414 (Rat, oral): NOEL > 540 mg/kg</p> <p>Effects on or via lactation: Lack of data.</p> <p>Specific target organ toxicity (single exposure): Lack of data.</p> <p>Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.</p> <p>Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700)</p> <p>OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents): NOAEL = 50 mg/kg</p> <p>OECD 411: NOAEL = 100 mg/kg</p> <p>Aspiration hazard: Lack of data.</p>
<p>Other information:</p>	<p>Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700):</p> <p>LD50 Rat, dermal > 2,000 mg/kg</p> <p>LD50 Rat, oral > 2,000 mg/kg</p> <p>LC0 Rat, inhalative 0.00001 ppm/5 h</p>

Symptoms

In case of ingestion: Mucous membrane irritation
 After contact with skin: Reddening.
 After eye contact: Reddening, causes tears.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.
 Reaction product with Bisphenol-A-(epichlorhydrin) epoxy resin (molecular weight ≤ 700):
 Algae toxicity:
 EC50 algae: 9.4 mg/L/72h. (EPA CFR)
 Daphnia toxicity:
 EC50 Daphnia magna: 1.7 mg/L/48h. (OECD 202)
 NOEC Daphnia magna: 0.3 mg/L/21dh. (OECD 211)
 Fish toxicity:
 LC50: 1.5 mg/L/96h. (OECD 203)

Mobility in soil

No data available

Persistence and degradability

Further details: Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700):
 Biodegradation: 5% (OECD 301 F).
 Product is not readily biodegradable.

Additional ecological information

Volatile organic compounds (VOC):
 0 % by weight
 General information: Do not allow to enter ground water or storm 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.
 Non-contaminated packages may be recycled.

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14. Transport information

USA: Department of Transportation (DOT)

Identification number: UN3082
 Proper shipping name: UN 3082, UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700))
 Hazard class or Division: 9
 Packing Group: III
 Labels: 9
 Symbols: G
 Special provisions: 8, 146, 173, 335, IB3, T4, TP1, TP29
 Packaging – Exceptions: 155
 Packaging – Non-bulk: 203
 Packaging – Bulk: 241
 Quantity limitations – Passenger aircraft / rail: No limit
 Quantity limitations – Cargo only: No limit
 Vessel stowage – Location: A



Sea transport (IMDG)

UN number: UN 3082
 Proper shipping name: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700))
 Class or division, Subsidiary risk: Class 9, Subrisk -
 Packing Group: III
 EmS: F-A, S-F
 Special provisions: 274, 335, 969
 Limited quantities: 5 L
 Excepted quantities: E1
 Contaminated packaging - Instructions: P001, LP01
 Contaminated packaging - Provisions: PP1
 IBC - Instructions: IBC03
 IBC - Provisions: -
 Tank instructions - IMO: -
 Tank instructions - UN: T4
 Tank instructions - Provisions: TP2, TP29
 Stowage and handling: Category A.
 Properties and observations: -
 Marine pollutant: yes
 Segregation group: none

Air transport (IATA)

UN/ID number: UN 3082
 Proper shipping name: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <=700))
 Class or division, Subsidiary risk: Class 9
 Packing Group: III
 Hazard label: Miscellaneous
 Excepted Quantity Code: E1
 Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y964 - Max. Net Qty/Pkg. 30 kg G
 Passenger and Cargo Aircraft: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
 Cargo Aircraft only: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L
 Special provisions: A97 A158 A197
 Emergency Response Guide-Code (ERG): 9L

15. Regulatory information

National regulations - U.S. Federal Regulations

Product: SARA Title III - Section 313 Supplier Notification: See chapter 2
 Bisphenol A epoxy resin (molecular-weight < 700): TSCA Inventory: listed; EPA flags XU
 TSCA HPVC: not listed

National regulations - Great Britain

Hazchem-Code: •3Z

16. Other information

Text for labeling: Contains 60 - 100 % Bisphenol A epoxy resin (molecular-weight < 700). Safety data sheet available on request.

Hazard rating systems: 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

Reason of change: Changes in section 1.3: Corporate headquarters
 Date of first version: 10/6/1994

Department issuing data sheet

Contact person: see section 1: Dept. 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.