

## 1. Product and company identification

### Product identifier

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

This safety data sheet pertains to the following products:

636W28 = O.B. Spezial Klebstoff Kartusche A und B

636W28=0.050 = O.B. Spezial Klebstoff A und B 50ml

### Recommended use and restrictions on use

General use: Adhesive for orthopedic procedures.  
Reserved for industrial and professional use.

### Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal Code, city: Burlington, ON L7L 5N5, CA  
Canada

WWW: www.ottobock.ca

E-mail: info.canada@ottobock.com

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

Corporate headquarters:  
Ottobock SE & Co. KGaA  
Max-Näder-Straße 15  
Duderstadt  
Germany

### Emergency phone number

**COLLECT, Telephone: (613) 996-6666**

**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 20 °C and 101.3 kPa: liquid

Color: white

Odor: weakly aromatic

Classification: Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 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 WHMIS 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 mixture.  
 see section 11: Toxicological information

## 3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 25068-38-6	Bisphenol A epoxy resin (molecular-weight < 700)	50 - 70 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 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 and effects, both 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:

> 149 °C (c.c.)

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing 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.

Special protective equipment and precautions for fire-fighters:

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

Additional information:

Use fine water spray to extinguish surrounding fire 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/aerosol. 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.

Additional information:

Special danger of slipping by leaking/spilling product.

## 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/aerosol. 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 mixture.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

## Storage

Requirements for storerooms and containers:

storage temperature 2 - 40 °C 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/aerosol.  
Keep away from food, drink and animal feedingstuffs.  
Take off immediately all contaminated clothing and wash it before reuse.

### Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid  
Color: white

Odor: weakly aromatic

Odor threshold: No data available

pH: at 50%: 6

Melting point/freezing point: No data available

Initial boiling point and boiling range: > 200 °C

Flash point/flash point range: > 149 °C (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 20 °C: 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 25 °C: 20 - 40 mPa*s

## 10. Stability and reactivity

Reactivity:	refer to section 10.3
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

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): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.

Serious eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Lack of data.

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

Germ cell mutagenicity/Genotoxicity: Inconclusive data.

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

OECD 471 (Ames test): positive

OECD 478 (Rodent Dominant Lethal Test): negative

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

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

OECD 453 (Rat, oral): negative

OECD 453 (Mouse, dermal): negative

Reproductive toxicity: Based on available data, the classification criteria are not met.

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

OECD 416 (Rat, oral): NOEL = 540 mg/kg

OECD 414 (Rat, oral): NOEL > 540 mg/kg

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

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

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )

OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents): NOAEL = 50 mg/kg

OECD 411: NOAEL = 100 mg/kg

Aspiration hazard: Lack of data.

Other information: Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ):

LD50 Rat, dermal > 2,000 mg/kg

LD50 Rat, oral > 2,000 mg/kg

### 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  $\leq 700$ ):  
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/21d. (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  $\leq 700$ ):  
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.

### Package

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

## 14. Transport information

### UN number

ADR/RID, IMDG, IATA-DGR:  
UN 3082

### UN proper shipping name

ADR/RID, IMDG, IATA-DGR:  
UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ))

### Transport hazard class(es)

ADR/RID: Class 9, Code: M6

IMDG: Class 9, Subrisk -

IATA-DGR: Class 9

### Packing group

ADR/RID, IMDG, IATA-DGR:

III

### Environmental hazards

Marine pollutant: yes

### 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: UN3082

Proper shipping name: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin  
(number average molecular weight  $\leq 700$ ))

Hazard class or Division: 9

Packing Group: III

Labels: 9

Symbols: G

Special Provisions: 8, 146, 173, 335, 441, 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

### Canada: Transportation of Dangerous Goods (TDG)

UN Number: UN3082

Shipping name: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ))

TDG class: 9

Packing group: III

Special provisions: 16, 99

Explosive limit and limited quantity index: 5 L

Marine pollutant: P





### 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: 274 335 375 969  
Limited quantities: 5 L  
Excepted quantities: E1  
Package - Instructions: P001, LP01  
Package - Provisions: PP1  
IBC - Instructions: IBC03  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T4  
Tank instructions - Provisions: TP1, 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 & Environmentally hazardous  
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 A215  
Emergency Response Guide-Code (ERG): 9L

## 15. Regulatory information

### National regulations - Canada

Bisphenol A epoxy resin (molecular-weight < 700): DSL: listed

### 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

### National regulations - U.S. State Regulations

No data available

### National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: annex I, part 1, E2.

## 16. Other information

Text for labeling:

Contains 50 - 70 % Bisphenol A epoxy resin (molecular-weight < 700).

Contains Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

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

Abbreviations and acronyms:

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

Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic

AS/NZS: Australian Standards/New Zealand Standards

BCF: Bioconcentration Factor

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

EU: European Union

Eye Irritation: Eye irritation

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

LC50: Median lethal concentration

LD50: Lethal dose 50%

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

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

MFSU: Manufacture, formulation, supply and use

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

OECD: Organisation for Economic Co-operation and Development

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

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

Sensitization - skin: Skin sensitisation

Skin Irritation: Skin irritation

TRGS: Technical Rules for Hazardous Substances

UN: United Nations

vPvB: Very persistent and very bioaccumulative

WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 14: IMDG 2025

Date of first version: 6/10/1994

**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.