



# SAFETY DATA SHEET

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

## 617Z4 - Pigment Paste, white, for resins

Material number 617Z 4

Revision date: 1/10/2025  
Version: 15.3  
Replaces version: 15.2  
Language: en-US  
Date of print: 9/2/2025

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## 1. Product and company identification

### Product identifier

Trade name: 617Z4 - Pigment Paste, white, for resins

This safety data sheet pertains to the following products:  
617Z4 = Farbpaste, weiß

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

General use: Pigment paste for lamination resin for orthopedic procedures  
For commercial user only

### 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: Physical state at 68 °F and 101.3 kPa: liquid  
Form: pasty  
Color: white  
Odor: weak  
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 breathing mist/vapors/spray.  
Wash hands and face thoroughly after handling.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection.  
Take off contaminated clothing and wash it before reuse.  
Collect spillage.

### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified

Special danger of slipping by leaking/spilling product.  
see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterization: Mixture of binders and pigments.

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 25068-38-6	Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ )	25 - 50 %	Skin Irritation - Category 2. Eye Irritation - Category 2A. Sensitization - skin - Category 1. Aquatic toxicity - chronic - Category 2.

## 4. First aid measures

General information: In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation: Provide fresh air. Put victim at rest and keep warm. In case of irregular breathing or respiratory arrest provide artificial respiration. When in doubt or if symptoms are observed, get medical advice.

Following skin contact: Take off contaminated clothing and wash it before reuse.  
After contact with skin, wash immediately with soap and plenty of water. Do not use solvents or thinners. In case of skin reactions, consult a physician.

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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: Have victim repeatedly drink large amounts of water with activated charcoal. Never give anything by mouth to an unconscious person. Do not induce vomiting. In case of breathing difficulties administer oxygen. Seek medical attention.

### Most important symptoms/effects, acute and delayed

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

### Information to physician

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

No data available

Auto-ignition temperature:

No data available

Suitable extinguishing media:

Alcohol resistant foam, carbon dioxide, dry chemical powder, water spray jet

Extinguishing media which must not be used for safety reasons:

Strong water jet

### Specific hazards arising from the chemical

Exposure to fire produces thick, black smoke that is hazardous to health. Hazardous decomposition byproducts may form with exposure to high temperatures. E.g.: Hydrogen chloride, Carbon monoxide, carbon dioxide and fume. Inhaling hazardous decomposing products can cause serious health damage.

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Use fine water spray to cool endangered containers. Do not allow water used to extinguish fire to enter drains, ground or waterways. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## 6. Accidental release measures

Personal precautions:

Provide adequate ventilation. Wear appropriate protective equipment. Avoid contact with skin, eyes, and clothing. Take off contaminated clothing and wash it before reuse. Keep unprotected people away. Avoid the formation of aerosol/vapors. Avoid breathing dust/fume/gas/mist/vapors/spray.

Environmental precautions:

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

Methods for clean-up:

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Thoroughly clean surrounding area. Clean using cleansing agents. Do not use solvents.

Additional information:

Special danger of slipping by leaking/spilling product.

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### 7. Handling and storage

#### Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.  
Avoid the formation of aerosol/vapors. Avoid breathing dust/fume/gas/mist/vapors/spray.  
Wear appropriate protective equipment. Avoid contact with skin, eyes, and clothing. Take off contaminated clothing and wash it before reuse.  
Do not empty containers with pressure - no pressure vessel!  
Handle and open container with care.  
Have eye wash bottle or eye rinse ready at work place. Wash hands before breaks and after work.

Precautions against fire and explosion:  
Keep away from heat sources, sparks and open flames. Take precautionary measures against static discharges.

#### Storage

Requirements for storerooms and containers:  
Store only in original, tightly closed containers at room temperature.  
Store containers in upright position. storage temperature: 59 - 86 °F.  
Protect against heat /sun rays.

Hints on joint storage:  
Keep away from strongly acidic and alkaline materials as well as oxidizers.  
Keep away from food, drink and animal feedingstuffs.

### 8. Exposure controls / personal protection

#### Engineering controls

Provide adequate ventilation.  
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 and shoes.  
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material:  
Nitrile rubber (0.4 mm)  
Chloroprene rubber (0.5 mm)  
Butyl caoutchouc (butyl rubber) (0.7 mm)  
Breakthrough time: > 480 min  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: In case of warming: development of gas/vapor possible:  
Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.  
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

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### General hygiene considerations:

When using do not eat, drink or smoke.  
Avoid contact with skin, eyes, and clothing. Take off contaminated clothing and wash it before reuse.  
Do not use any organic solvents. Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

### Environmental exposure controls

Do not allow to enter into ground-water, surface water or drains.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: liquid Form: pasty Color: white
Odor:	weak
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:	No data available
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:	at 68 °F: 1.73 g/cm <sup>3</sup>
Water solubility:	miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

## 10. Stability and reactivity

Reactivity:	Refer to subsection "Possibility of hazardous reactions".
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.
Conditions to avoid:	Take precautionary measures against static discharges. Protect against heat /sun rays.
Incompatible materials:	Avoid contact with strong acids, strong bases and strong oxidizing agents.

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### Hazardous decomposition products:

Hazardous decomposition products such as carbon dioxide, carbon monoxide, fumes, nitrogen oxides may develop with exposure to high temperatures.

### Thermal decomposition:

No data available

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

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

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

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

Sensitisation to the respiratory tract: Lack of data.

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

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

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

Effects on or via lactation: Lack of data.

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

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

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

### Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

## 12. Ecological information

### Ecotoxicity

#### Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

### Mobility in soil

No data available

### Persistence and degradability

#### Further details:

No data available

### Additional ecological information

Volatile organic compounds (VOC):

0 % by weight / 0 g/L (ASTM D-3960-1, ISO 1)

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.  
Do not dispose of with household waste.

### Package

Recommendation:

Waste key number:

150104 metallic packaging

150102 Plastic packaging

Dispose of waste according to applicable legislation.

## 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.  
(Bisphenol A epoxy resin)

### 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

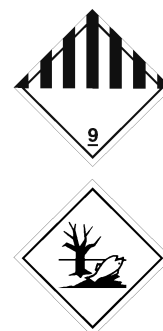
### Environmental hazards

Marine pollutant:

yes

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available



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### USA: Department of Transportation (DOT)

Identification number: UN3082  
Proper shipping name: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (Bisphenol A epoxy resin)  
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



### Sea transport (IMDG)

UN number: UN 3082  
Proper shipping name: UN 3082,  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Bisphenol A epoxy resin)  
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



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### Air transport (IATA)

UN/ID number: UN 3082  
Proper shipping name: UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin)  
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 - U.S. Federal Regulations

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

TSCA Inventory: listed

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

No data available

### National regulations - Canada

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

DSL: listed

### National regulations - Great Britain

Hazchem-Code: •3Z

## 16. Other information

Text for labeling: Contains 25 - 50 % Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ ).

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

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



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### 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  
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  
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods  
EN: European Standard  
EQ: Excepted quantities  
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  
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  
Skin Irritation: Skin irritation  
TRGS: Technical Rules for Hazardous Substances  
UN: United Nations  
vPvB: Very persistent and very bioaccumulative

Reason of change: Changes in section 14: IMDG 2025

Date of first version: 10/6/1994

### 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.