

617Z4 - Pigment Paste, white, for resins

Material number 617Z 4

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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

Recommended use and restrictions on use

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

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

Form: pasty

Color: white

Odor: weak

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 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) and WHMIS in Canada.

Hazards not otherwise classified

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

3. Composition / Information on ingredients

Chemical characterisation: 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 ≤ 700)	25 - 50 %	Skin Irritation 2. Eye Irritation 2A. Sensitization - skin 1. Aquatic toxicity - chronic 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.

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.

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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 and effects, both 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, extinguishing 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.

Special protective equipment and precautions for fire-fighters:

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: 15 - 30 °C.
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 20 °C 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 20 °C: 1.73 g/cm ³
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 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: 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

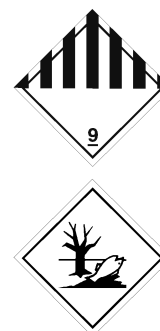
ADR/RID, IMDG, IATA-DGR:

III

Environmental hazards

Marine pollutant:

yes



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

No data available

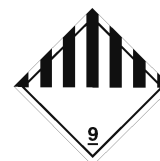
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USA: Department of Transportation (DOT)

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



Canada: Transportation of Dangerous Goods (TDG)

UN Number: UN3082
Shipping name: UN 3082,
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Bisphenol A epoxy resin)
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.
(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 - Canada

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

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 - 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]: E2.

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



SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010

617Z4 - Pigment Paste, white, for resins

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

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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
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
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
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.