

1. Product and company identification

Product identifier

Trade name: 636K49=B - SuperGlue Part B

This safety data sheet pertains to the following products:

636K49 = SuperGlue

636K49=0.010 = SuperGlue 10 ml

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

General use: Two-component glue
Component B

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: Paste

Color: Varying, depends on coloring: white, black, gray

Odor: Mild

Classification: Flammable Liquid - Category 4. Eye Irritation - Category 2A. Sensitization - skin - Category 1.

Hazard symbols:



Signal word:

Warning

Hazard statements:

Combustible liquid.

May cause an allergic skin reaction.

Causes serious eye irritation.

Precautionary statements:

Avoid breathing mist/vapors/spray.

Wash hands and face thoroughly after handling.

Wear protective gloves/protective clothing/eye protection.

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

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

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

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 94-36-0	Dibenzoyl peroxide	< 14 %	Organic Peroxide - Category B. Eye Irritation - Category 2A. Sensitization - skin - Category 1.
CAS 25068-38-6	Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	< 2.5 %	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. Take off contaminated clothing and wash it before reuse.

In case of inhalation:

Move victim to fresh air, put at rest and loosen restrictive clothing. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. Seek medical attention.

Following skin contact:

After contact with skin, wash immediately with soap and plenty of water. 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. Drink large quantities of water. Never give anything by mouth to an unconscious person. Immediately get medical attention.

Most important symptoms/effects, acute and delayed

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

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

> 185 °F (c.c.)

Auto-ignition temperature: No data available

Suitable extinguishing media:

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

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Heating may cause a fire. In case of fire may be liberated: Smoke, hydrocarbons, Nitrogen oxides (NOx), Hydrogen chloride, 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:

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

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

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:

Avoid breathing mist/vapors/spray. Avoid contact with the substance.

Eliminate all ignition sources if safe to do so. Provide adequate ventilation.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.

Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!

In case of release, notify competent 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).
Beware of reignition. Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Use explosion-proof equipment and non-sparking tools/utensils.
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.
Avoid contact with skin and eyes. Wear appropriate protective equipment.
Guarantee sufficient ventilation during and after use, in order to prevent vapor accumulation.
Avoid breathing mist/vapors/spray. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product.
Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion: Keep away from sources of ignition - No smoking.
Take precautionary measures against static discharges.
Use only explosion-protected equipment/instruments. Do not weld.
In partially filled containers explosive mixtures may form.

Storage

Requirements for storerooms and containers: Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position. Explosion protection required. Protect from frost.
Storage temperature: < 77 °F

Hints on joint storage: Do not store together with combustible or self-igniting materials or any highly flammable solids. Keep away from food, drink and animal feedingstuffs.
Do not store together with: Strong bases, strong acids, oxidizing agents, reducing agents, ammonia, halogens, acids (inorganic), isocyanates, metals

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
94-36-0	Dibenzoyl peroxide	USA: ACGIH: TWA	5 mg/m ³
		USA: IDLH: TWA	1,500 mg/m ³
		USA: NIOSH: TWA	5 mg/m ³
		USA: OSHA: TWA	5 mg/m ³

Engineering controls

Provide for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.

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.

Glove material:

Butyl caoutchouc (butyl rubber), 0.7 mm, Breakthrough time: <240 min

Butyl caoutchouc (butyl rubber), 0.35 mm, Breakthrough time: <30 min

Neoprene/nitrile rubber, 0.2 mm, Breakthrough time: <10 min

Latex/nitrile rubber, 0.1 mm, Breakthrough time: <1 min

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

Respiratory protection: In case of inadequate ventilation wear respiratory protection. Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.

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.

General hygiene considerations:

Avoid contact with skin and eyes. Avoid breathing mist/vapors/spray. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Use only non-sparking tools. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Wash hands before breaks and after work.

Have eye wash bottle or eye rinse ready at work place.

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 68 °F and 101.3 kPa: liquid Form: Paste Color: Varying, depends on coloring: white, black, gray
Odor:	Mild
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	> 302 °F
Flash point/flash point range:	> 185 °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:	at 73.4 °F: 1.13 - 1.65 g/mL
Water solubility:	Insoluble
Partition coefficient: n-octanol/water:	3.242 log P(o/w) (Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)) Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Thermal decomposition:	230 °F
Viscosity, dynamic:	100 - 300 Pa*s (Brookfield)

10. Stability and reactivity

Reactivity:	Refer to subsection "Possibility of hazardous reactions".
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No hazardous reaction when handled and stored according to provisions.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from: UV-radiation/sunlight Protect from frost.
Incompatible materials:	Strong bases, strong acids, oxidizing agents, reducing agent, ammonia, halogens, acids (inorganic), isocyanates, metals
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.
Thermal decomposition:	230 °F

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: Lack of data.

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: 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.

Other information: Information about Dibenzoyl peroxide (CAS 94-36-0):
 LD50 Mouse, oral: > 2,000 mg/kg (OECD 401)
 LC50 Rat, inhalative (dust): > 24.3 mg/L/4h (OECD 403)
 Carcinogenic effect:
 IARC Rating: Group 3
 OSHA Carcinogen: not listed
 NTP Rating: not listed

Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS 25068-38-6):
 LD50 Rat, oral: 11,400 mg/kg
 LD50 Rabbit, dermal: 22,800 mg/kg

Symptoms

In case of inhalation:
 The inhalation of dust/mist or aerosols causes irritation of the respiratory tract.

In case of ingestion: Irritation of mucuous membranes of digestive system possible.

After contact with skin:
 Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

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

12. Ecological information

Ecotoxicity

Aquatic toxicity: Information about dibenzoyl peroxide (CAS 94-36-0):
Fish toxicity:
LC50 *Poecilia reticulata*: 2 mg/L/96h
Daphnia toxicity:
EC10 *Daphnia magna* (Big water flea): 0.001 mg/L/21d (OECD 211)
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS 25068-38-6):
Fish toxicity:
LC50 fish: 1.5 mg/L/96 (OECD 203)
Daphnia toxicity:
EC50 *Daphnia* sp.: 1.7 mg/L/48h (OECD 202)
NOEC *Daphnia magna* (Big water flea): 0.3 mg/L/21d (OECD 211)
Algae toxicity:
EC50 algae: 9.4 mg/L/72h
Bacterial toxicity:
IC50 bacteria: > 100 mg/L/3h

Mobility in soil

No data available

Persistence and degradability

Further details: Abiotic degradation, water:
Information about dibenzoyl peroxide (CAS 94-36-0): < 1 days (OECD 111, hydrolysis)
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS 25068-38-6): 3.58 - 7.1 days (half-life time)
Biodegradability:
Information about dibenzoyl peroxide (CAS 94-36-0): 71 %/28 d (OECD 301 D), easily bio-degradable
Information about Reaction product: Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) (CAS 25068-38-6): 5 %/28 d (OECD 301 F), poorly biodegradable

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight / 0 g/L

General information:

Do not allow to enter into ground-water, surface water or 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.
Handle contaminated packages in the same way as the substance itself.
Non-contaminated packages may be recycled.

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:	NA1993
Proper shipping name:	NA 1993, Combustible liquids, n.o.s. (Dibenzoyl peroxide)
Hazard class or Division:	Comb liq
Packing Group:	III
Labels:	None
Symbols:	D G
Special Provisions:	148, IB3, T1, TP1
Packaging – Exceptions:	150
Packaging – Non-bulk:	203
Packaging – Bulk:	241
Quantity limitations – Passenger aircraft / rail:	60 L
Quantity limitations – Cargo only:	220 L
Vessel stowage – Location:	A

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

Dibenzoyl peroxide:

TSCA Inventory: listed

Carcinogen Status:

IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

NIOSH Recommendations:

Occupational Health Guideline: 0052

OSHA Process Safety Management:

Threshold 7500 lbs.

TSCA Inventory: listed

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

National regulations - U.S. State Regulations

Dibenzoyl peroxide:

California Proposition 65 code: -

Delaware Air Quality Management List:

DRQ: 100 - RQ State requirement differs from Federal

Idaho Air Pollutant List:

Title 585: AAC: 0,25 - EL: 0,333 - OEL: 5 - Title 586: -

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

Minnesota Haz. Substance:

Codes: ANO - Ratings: - - Status: Title III. TRI.

New Jersey Extraordinary Hazardous Substances:

EPA Threshold: - NJ Threshold: 2500

NJ Group: I - NJ Table: I Part D - NJ Basis: NFPA 432

New Jersey RTK Hazardous Substance:

DOT: 2085 - Sub No.: 0215 - TPQ: -

Pennsylvania Haz. Substance code: E

Washington Air Contaminant:

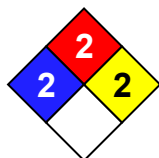
TWA: 5 mg

16. Other information

Text for labeling:

Contains < 14 % Dibenzoyl peroxide, < 2.5 % Reaction product:
Bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700).

Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 2 (Moderate)

Reactivity: 2 (Moderate)

HMIS Version III Rating:

Health: 2 (Moderate)

Flammability: 2 (Moderate)

Physical Hazard: 2 (Moderate)

Personal Protection: X = Consult your supervisor

HEALTH	2
FLAMMABILITY	2
PHYSICAL HAZARD	2
	X

Classification procedure: Health hazards: calculation method

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
 EC50: Effective Concentration 50%
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 Eye Irritation: Eye irritation
 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%
 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
 NOEC: No Observed Effect Concentration
 OEL: Occupational Exposure Limit Value
 Organic Peroxide: Organic peroxide
 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
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 UV: Ultraviolet
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit

Reason of change: Changes in section 2: classification, labeling
 Changes in section 11: Toxicological information
 Changes in section 12: Ecological information
 General revision

Date of first version: 9/30/2015

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.