

SAFETY DATA SHEET



Epoxy phenol novolac + Stainless Steel spacer + BaF2

Date of issue: 07/06/2023
Version: 1.0

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2015/830. An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
Product name Epoxy phenol novolac + Stainless Steel spacer + BaF2
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
Identified Use(s) Liquid sample holder at ambient conditions (pressure and temperature) for transmission spectrophotometers.
Uses advised against Anything other than the above.
- 1.3 Details of the supplier of the safety data sheet**
Company Identification Specac Ltd.
Unit 12, Science and Innovation Centre Halo Business Park, Cray Ave.,
Orpington
BR5 3FQ,
United Kingdom
Telephone +44 1689 892902
E-mail (competent person) sdscontact@specac.co.uk
- 1.4 Emergency telephone number**
Emergency Phone No. +44 1865 407333
Languages spoken English

2. SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture Regulation (EC) No. 1272/2008 (CLP)**
This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2015/830. Since this material has no intended release of a substance and will not result in exposure to a hazardous chemical under normal conditions of use, no hazard classification or Safety Data Sheet is required. An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.
- 2.2 Label elements**
Not applicable.
Hazard Pictogram(s) Not applicable.
Signal Word(s) Not applicable.
Hazard Statement(s) Not applicable.
Precautionary Statement(s) Not applicable.
Supplemental information Not applicable.
- 2.3 Other hazards**
None known

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Barium fluoride	85 - 100	7787-32-8	232-108-0	Not required	Eye Irrit. 2; H319 Acute Tox. 2; H330

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Epoxy phenol novolac	0.4 – 0.5	28064-14-4	608-164-0	Not required	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 Aquatic Chronic 2; H411
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Note: For full text of H phrases see section 16.

An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Self-protection of the first aider

Inhalation

Skin contact

Eye contact

Ingestion

No special precautions are required for this product.

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if necessary. Apply artificial respiration if necessary. If symptoms persist, obtain medical attention.

If skin irritation occurs, get medical advice/attention. Wash skin with water. If irritation (redness, rash, blistering) develops, get medical attention.

Remove contact lenses, if present and easy to do. Continue rinsing. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. If irritation develops and persists, get medical attention.

If swallowed, rinse mouth with water (only if the person is conscious). Administer oxygen if necessary. Apply artificial respiration if necessary. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

No information available. Treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media

Use fire extinguishing methods suitable to surrounding conditions.

Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substance or mixture

Non-combustible. On overheating or burning: release of toxic and corrosive gases/vapours. Decomposition products: Hydrogen fluoride.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Toxic fumes may be produced in a fire. Avoid contact with skin and eyes. Do not allow run-off from fire fighting to enter drains or water courses. Move undamaged containers from immediate hazard area if it can be done safely. Keep containers cool by spraying with water if exposed to fire.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

General measures applicable to all activities

Eliminate all ignition sources if safe to do so. Avoid contact with skin, eyes or clothing. Do not ingest. Do not heat the product. Do not allow to enter drains, sewers or watercourses.

6.1.1 For non-emergency personnel

Personal precautions, protective equipment and emergency procedures
Emergency procedures

Wear suitable protective clothing. Keep upwind. In case of fire: Use self-contained breathing apparatus. Wear suitable gloves and eye/face protection.
No special measures are required.

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6.1.2 Self-protection of the first aider	Personal precautions, protective equipment and emergency procedures Emergency procedures	Wear suitable protective clothing, gloves and eye/face protection. Ensure adequate ventilation. In case of inadequate ventilation wear respiratory protection. No special measures are required.
6.2 Environmental precautions		Do not allow run-off from fire fighting to enter drains or water courses. Use appropriate containment. Ensure all waste water is collected and treated via a waste water treatment plant. Avoid release to the environment. If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities.
6.3 Methods and material for containment and cleaning up		Use appropriate container to avoid environmental contamination. Keep in properly labeled containers. Dispose of contents in accordance with local, state or national legislation.
6.4 Reference to other sections		See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling		Avoid contact with skin, eyes or clothing. Do not ingest. Use personal protective equipment as required. Remove contaminated clothing and wash clothing before reuse. Ensure adequate ventilation. Opened containers should be carefully resealed and stored in an upright position. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	Hygiene Measures	Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take care for general good hygiene and housekeeping.
7.2 Conditions for safe storage, including any incompatibilities	storage temperature Incompatible materials	Keep only in the original container. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Ambient temperatures. Keep away from: Strong mineral acids
7.3 Specific end use(s)		See Section: 1.2

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters		
8.1.1 Occupational exposure limits		None assigned
8.1.2 Biological limit value		Not established
8.1.3 PNECs and DNELs		Not established
8.2 Exposure controls		
8.2.1 Appropriate engineering controls		Ensure adequate ventilation. Ensure that the equipment is adequately grounded. Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources. Guarantee that the eye flushing systems and safety showers are located close to the working place.
8.2.2 Individual protection measures, such as personal protective equipment		Keep good industrial hygiene. Avoid contact with skin, eyes or clothing. Do not ingest. Use personal protective equipment as required. Remove contaminated clothing and wash clothing before reuse. Do not eat, drink or smoke at the work place. Wash hands before breaks and after work.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection	Ensure use of tightly-fitting safety goggles.
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Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems.

Recommended: PVA (Polyvinyl alcohol), PVC, Natural rubber.

Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

Respiratory protection



Body protection: Body protection must be chosen depending on activity and possible exposure e.g. head protection, apron, protective boots.

In case of inadequate ventilation wear respiratory protection: A suitable dust mask or dust respirator with filter type P may be appropriate.

Thermal hazards

Not applicable

8.2.3 Environmental exposure controls

Avoid release to the environment.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear glass geometric shapes, amber-brown
Odour	None
Odour threshold	No information available.
pH	Not applicable
Melting point/freezing point	No information available.
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	No information available.
Solubility(ies)	No information available.
Partition coefficient: n-octanol/water	Not applicable
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity	Not applicable
Explosive properties	No information available.
Oxidising properties	No information available.

9.2 Other information

None known

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Reacts with – Strong mineral acids.
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	On overheating or burning: release of toxic and corrosive gases/vapours.
10.4 Conditions to avoid	Should be kept away from naked flames and other sources of ignition.
10.5 Incompatible materials	Keep away from: Strong mineral acids
10.6 Hazardous decomposition products	Decomposition products: Hydrogen fluoride.

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11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2015/830. This product does not contain any known "substances of very high concern" (SVHC's). An SDS has been provided for supply chain communication purposes and handling / storage recommendations only.

Acute toxicity

Ingestion Based upon the available data, the classification criteria are not met.
Inhalation Based upon the available data, the classification criteria are not met.

Barium fluoride Acute Tox. 2; H330: Fatal if inhaled.
LC50 (rat): 1 – 5 mg/L (OECD 403) (Unnamed publication, 2018)

Skin contact Based upon the available data, the classification criteria are not met.

Skin corrosion/irritation

Epoxy phenol novolac Based upon the available data, the classification criteria are not met.

Skin Irrit. 2; H315: Causes skin irritation.
No information available.

Serious eye damage/irritation

Barium fluoride Based upon the available data, the classification criteria are not met.

Eye Irrit. 2; H319: Causes serious eye irritation.
Reversible effects on the eye (rabbit) (OECD 405) (Unnamed publication, 2010)

Epoxy phenol novolac Eye Irrit. 2; H319: Causes serious eye irritation.

No information available.

Respiratory or skin sensitisation

Epoxy phenol novolac Based upon the available data, the classification criteria are not met.

Skin. Sens. 1; H317: May cause an allergic skin reaction.

No information available.

Germ cell mutagenicity

Based upon the available data, the classification criteria are not met.

Carcinogenicity

Based upon the available data, the classification criteria are not met.

Reproductive toxicity

Based upon the available data, the classification criteria are not met.

STOT - single exposure

Based upon the available data, the classification criteria are not met.

STOT - repeated exposure

Based upon the available data, the classification criteria are not met.

Aspiration hazard

Based upon the available data, the classification criteria are not met.

11.2 Other information

No information available.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Epoxy phenol novolac Based upon the available data, the classification criteria are not met.
Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects.

No information available.

12.2 Persistence and degradability

No information available.

Barium fluoride Not applicable for inorganic substances.

12.3 Bioaccumulative potential

Epoxy phenol novolac No information available.

No information available.

Barium fluoride No information available.

12.4 Mobility in soil

Epoxy phenol novolac No information available.

No information available.

Barium fluoride The substance has low mobility in soil.

Weight of evidence approach.

Log Kp: 1.78 (Unnamed publication, 1997)

Epoxy phenol novolac No information available.

12.5 Results of PBT and vPvB assessment

None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.

12.6 Other adverse effects

No information available.

13. SECTION 13: DISPOSAL CONSIDERATIONS

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13.1 Waste treatment methods Do not allow to enter drains, sewers or watercourses. Dispose of this material and its container as hazardous waste Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

	ADR/RID	IMDG/ADN
14.1 UN number	UN 3546	UN 3546
14.2 Proper Shipping Name	ARTICLES CONTAINING TOXIC SUBSTANCES, N.O.S (Barium fluoride)	ARTICLES CONTAINING TOXIC SUBSTANCES, N.O.S (Barium fluoride)
14.3 Transport hazard class(es)	6.1	6.1
14.4 Packing group	None assigned	None assigned
14.5 Environmental hazards	Not classified as a Marine Pollutant.	
14.6 Special precautions for user	See Section: 2	
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable	
14.8 Additional information		
	Special Provisions 274	
	Limited Quantity 0 kg	
	Tunnel restriction code 4 (E)	

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1 EU regulations	
Authorisations and/or restrictions on use	Not restricted
Substance(s) of Very High Concern (SVHCs)	None of the substances is included on the Candidate List of Substances of Very High Concern for authorisation (Annex XIV) under REACH Regulation (EC) No. 1907/2006.
RoHS – EEE Substance Inventory	Stainless Steel: Yes (Presence in EEE: Plausable)
15.1.2 National regulations	
Germany	
Wassergefährdungsklasse (Germany)	Not applicable
15.2 Chemical Safety Assessment	A chemical safety assessment is not required under REACH.

16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Not applicable - V1.0

References: Safety Data Sheets for ingoing ingredients Regulation (EC) No. 1272/2008 (CLP). REACH Regulation (EC) No. 1907/2006. ECHA registration dossier for Barium fluoride (CAS No. 7787-32-8).

Hazard classification: This material is produced as an "article" as defined in Regulation (EC) No 1907/2006 (REACH Regulation) and is therefore exempt from CLP 1272/2008 and SDS regulation 2015/830.

Legend

ADN	ADN: European Agreement on the International Transport of Dangerous Goods by Inland Waterways
ADR	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL	Derived no effect level
EC	European Community
ECHA	European Chemicals Agency
HSE	Health and Safety Executive

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IATA	IATA: International Air Transport Association
ICAO	ICAO: International Civil Aviation Organization
IMDG	IMDG: International Maritime Dangerous Goods
LTEL	Long term exposure limit
OECD	Organisation for Economic Cooperation and Development
PBT	PBT: Persistent, Bioaccumulative and Toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	RID: Regulations concerning the international railway transport of dangerous goods
STEL	Short term exposure limit
UN	United Nations
vPvB	vPvB: very Persistent and very Bioaccumulative

Hazard classification / Classification code:

Skin Irrit. 2; Skin corrosion/irritation, Category 2
Skin Sens. 1; Skin Sensitisation, Category 1
Eye Irrit. 2; Eye Irritation, Category 2
Acute Tox. 2; Acute Toxicity, Category 2
Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic ,
Category 2

Hazard Statement(s)

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H330: Fatal if inhaled.
H411: Toxic to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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