SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : MASTIC EPOXY CO-EXTRUDE CUIVRE
UFI : A6JA-CWGY-U402-9TNC

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

epoxy mastic for reparing

Read the technical data sheet for the operating procedure and an effective result

1.3. Details of the supplier of the safety data sheet

Registered company name : GEB.

Address : CS 62062.95972.ROISSY CDG CEDEX . France.

Telephone : +33 1 48 17 99 99. Fax : +33 1 48 17 98 00.

geb@geb.fr

www.geb.fr

1.4. Emergency telephone number : +33 1 45 42 59 59.

Association/Organisation : INRS.

|>SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin irritation, Category 2 (Skin Irrit. 2, H315).

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Skin sensitisation, Category 1 (Skin Sens. 1, H317).

Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).

This substance does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

|> In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :

GHS09

GHS07

Signal Word :

WARNING

Product identifiers :

EC 615-735-8	POLY(OXY(METHYL-1.2-ETHANEDIYL))? A-HYDRO-W-HYDROXY-, ETHER WIH 2.2-BIS(HYDROXYMETHYL)-1.3-PROPANEDIOL (4:1), 2-HYDROXY-3-MERCAPTOPROPYL ETHER
CAS 28064-14-4	PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER
EC 216-823-5	BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Additional labeling :

EUH205	Contains epoxy constituents. May produce an allergic reaction.

Hazard statements :

H315	Causes skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements - General :	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
Precautionary statements - Prevention :	
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
Precautionary statements - Response :	
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
Precautionary statements - Disposal :	
P501	Discard content/container according to applicable regulations.

2.3. Other hazards

The substance does not fulfil the PBT or vPvP criteria in accordance with annexe XIII of the REACH regulations EC 1907/2006.

|>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

|> Composition :

Identification	Classification (EC) 1272/2008	Note	%
CAS: 72244-98-5 EC: 615-735-8 REACH: 01-2120118957-46 POLY(OXY(METHYL-1.2-ETHANEDIYL))?A-HYDRO-W-HYDROXY-, ETHER WIH 2.2-BIS(HYDROXYMETHYL)-1.3-PROPANE DIOL (4:1), 2-HYDROXY-3-MERCAPTOPROPYL ETHER	GHS07 Wng Skin Sens. 1B, H317 Aquatic Chronic 3, H412		10 <= x % < 25
CAS: 28064-14-4 PHENOL, POLYMER WITH FORMALDEHYDE, GLYCIDYL ETHER	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411		2.5 <= x % < 10
INDEX: 603-069-00-0 CAS: 90-72-2 EC: 202-013-9 REACH: 01-2119560597-27-XXXX 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	GHS07 Wng Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315		2.5 <= x % < 10
CAS: 1675-54-3 EC: 216-823-5 BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE	GHS07, GHS09 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411		2.5 <= x % < 10

COPPER FLAKES (COATED WITH ALIPHATIC ACID)	GHS06, GHS09 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Acute Tox. 3, H331 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 10		0 <= x % < 2.5

|> **Specific concentration limits:**

Identification	Specific concentration limits	ATE
CAS: 1675-54-3 EC: 216-823-5 BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE	Skin Irrit. 2: H315 >=5% Eye Irrit. 2: H319 C>= 5%	
COPPER FLAKES (COATED WITH ALIPHATIC ACID)		inhalation: ATE = 0.733 mg/l 4h (dust/mist) oral: ATE = 500 mg/kg BW

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated aera is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder

- BC powder
- carbon dioxide (CO2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the substance is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this substance.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid skin and eye contact with this substance.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the substance is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep out of reach of children.

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

|>SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

|> 8.1. Control parameters

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

|> **Final use:**	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.2 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	0.31 mg of substance/m3

|> Predicted no effect concentration (PNEC):

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

Environmental compartment:	Fresh water.
PNEC :	0.084 mg/l
Environmental compartment:	Sea water.
PNEC :	0.0084 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	0.84 mg/l
Environmental compartment:	Waste water treatment plant.
PNEC :	0.2 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVA (Polyvinyl alcohol)
- Butyl Rubber (Isobutylene-isoprene copolymer)

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

|>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Paste.

Colour

Unspecified

Odour

Odour threshold :	Not stated.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash Point Interval :	FP > 100°C.

Auto-ignition temperature

Self-ignition temperature :	Not relevant.

Decomposition temperature

Decomposition point/decomposition range :	Not relevant.

pH

pH (aqueous solution) :	Not stated.
pH :	Not relevant.

Kinematic viscosity

Viscosity :	Not stated.

Solubility

Water solubility :	Insoluble.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.

Vapour pressure

Vapour pressure (50°C) :	Not relevant.

Density and/or relative density

Density :	> 1

Relative vapour density

Vapour density :	Not stated.

|> **Particle characteristics**

The substance does not contain nanoforms.

9.2. Other information

VOC (g/l) :	0

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This substance is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the substance can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

|>SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to vapours from this solvent in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

Repeated or prolonged contact with the substance may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

May cause an allergic reaction by skin contact.

Constituents with a low molecular weight irritate the eyes, mucous membranes and the skin

Repeated contact with the skin may cause irritation and hypersensitisation, possibly in combination with other epoxide compounds.

|> **11.1.1. Substances**

|> **Acute toxicity :**

COPPER FLAKES (COATED WITH ALIPHATIC ACID)

Oral route :	LD50 = 500 mg/kg bodyweight/day
Inhalation route (Dusts/mist) :	LC50 = 0.733 mg/l Duration of exposure : 4 h

11.2. Information on other hazards

|> **Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 1675-54-3 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

|>SECTION 12 : ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the substance and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

|>SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).

14.1. UN number or ID number

3077

|> **14.2. UN proper shipping name**

UN3077=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(bis-[4-(2,3-epoxipropoxi)phenyl]propane)

14.3. Transport hazard class(es)

- Classification :

9

14.4. Packing group

III

14.5. Environmental hazards

- Environmentally hazardous material :

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M7	III	9	90	5 kg	274 335 375 601	E1	3	-

Not subject to this regulation if Q <= 5 l / 5 kg (ADR 3.3.1 - DS 375)

|>

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	9	-	III	5 kg	F-A. S-F	274 335 966 967 969	E1	Category A SW23	-

Not subject to this regulation if Q <= 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	956	400 kg	956	400 kg	A97 A158 A179 A197 A215	E1
	9	-	III	Y956	30 kg G	-	-	A97 A158 A179 A197 A215	E1

Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(copper flakes (coated with aliphatic acid))

14.7. Maritime transport in bulk according to IMO instruments

No data available.

|>SECTION 15 : REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

Substance not restricted under Annex XVII of Regulation (EC) no. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

|> Explosives precursors :

The substance is not subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

|>SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the substance and not as a guarantee of the properties thereof.

|> Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

|> Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

UFI : Unique formulation identifier.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

GHS09 : Environment

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.

|> Modification compared to the previous version