

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier

- Trade name: **TB 2273D (< 5 L)**

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

- Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

- Product category PC1 Adhesives, sealants

- Application of the substance / the mixture

Epoxy resin

- 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: THREE BOND EUROPE S.A.S TEL : 33 (0)1 34 32 39 60
B.P 9105
95073 CERGY PONTOISE FAX : 33 (0)1 34 32 39 61
FRANCE

- Information department: Three Bond Europe H&S department : msds@threebond.fr
Site : http://quickfds.com

- 1.4 Emergency telephone number:

ORFILA (France) - Tel : +33 (0)1 45 42 59 59 (24h)
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- 2.2 Label elements

- Labelling according to

Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS07 GHS09

- Signal word

Warning

- Hazard-determining components of labelling:

bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight < 700)

Butyl Acrylate-methyl methacrylate-Methacrylic Acid polymer

- Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

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








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- Precautionary statements**
- | | |
|----------------|--|
| P261 | Avoid breathing fume. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves / eye protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
- Additional information:** Contains epoxy constituents. May produce an allergic reaction.
- 2.3 Other hazards**
- Results of PBT and vPvB assessment**
- PBT:** Not applicable.
- vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures**
- Description:** Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

CAS: 9003-36-5 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-XXXX	bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight < 700)  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; Skin Sens. 1, H317	50-100%
CAS: 25035-69-2	Butyl Acrylate-methyl methacrylate-Methacrylic Acid polymer  Skin Irrit. 2, H315;  Eye Irrit. 2, H319; STOT SE 3, H335	10-25%
CAS: 25068-38-6 NLP: 500-033-5 Reg.nr.: 01-2119456619-26-XXXX	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315;  Eye Irrit. 2, H319; Skin Sens. 1, H317	5-<10%
CAS: 134091-76-2	reaction product of an epoxy, an imidazole and a carboxylic acid  Eye Irrit. 2, H319; Skin Sens. 1, H317	1-2.5%
CAS: 2530-83-8 EINECS: 219-784-2	[3-(2,3-epoxypropoxy)propyl]trimethoxysilane  Acute Tox. 3, H331;  Eye Dam. 1, H318	0.1-0.5%

- SVHC** None
- Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures**
- After inhalation** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact** Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

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- After swallowing

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Do not induce vomiting; call for medical help immediately.
A person vomiting while lying on their back should be turned onto their side.
Induce vomiting, only if affected person is fully conscious.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Use fire fighting measures that suit the environment.

- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide (CO)

- 5.3 Advice for firefighters

- Protective equipment:

Wear self-contained respiratory protective device.
Wear fully protective suit.

- Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Wear protective clothing.

- 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.
Dispose contaminated material as waste according to item 13.

- 6.4 Reference to other sections

See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
 - Keep away from heat and direct sunlight.
 - Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 - Store in a cool location.
 - Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:**
 - Do not store together with oxidising and acidic materials.
 - Store away from reducing agents.
 - Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
- **7.3 Specific end use(s)**
 - No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:**
 - The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 - The usual precautionary measures should be adhered to when handling chemicals.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
- **Breathing equipment:**
 - Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
 -  Protective gloves.
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 - Nitrile rubber, NBR
- **Penetration time of glove material**
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
 - Safety glasses

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- **Body protection:** Protective work clothing.

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SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

- Appearance:

Form: Pasty
Colour: White
- Odour: Characteristic

- Change in condition

Melting point/freezing point: Not determined
Initial boiling point and boiling range: Not applicable

- Flash point: Not applicable

- Flammability (solid, gaseous) Not applicable.

- Self igniting: Product is not selfigniting.

- Explosive properties: Product does not present an explosion hazard.

- Density at 25 °C: 1.2

- Solubility in / Miscibility with Water: Not miscible or difficult to mix

- Viscosity:
dynamic at 25 °C: 70000 mPas
- 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions
Danger of polymerization
Reacts with alkali, amines and strong acids

- 10.4 Conditions to avoid No further relevant information available.

- 10.5 Incompatible materials: No further relevant information available.

- 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects

- Acute toxicity Based on available data, the classification criteria are not met.

- LD/LC50 values that are relevant for classification:

9003-36-5 bisphenol F-(epichlorhydrin); epoxy resin(number average molecular weight < 700)

Oral	LD50	> 5000 mg/kg (Rat)
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25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Oral	LD50	> 2000 mg/kg (rat)
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Dermal	LD50	>2000 mg/kg (rat)
2530-83-8 [3-(2,3-epoxypropoxy)propyl]trimethoxysilane		
Oral	LD50	7010 mg/kg (rat)
Dermal	LD50	4250 mg/kg (rat)
Inhalative	LC50/4 h	>5.3 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** 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.
- **STOT-single exposure** May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must be specially treated adhering to official regulations.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
Packaging can be reused or recycled after cleaning.

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SECTION 14: Transport information

- 14.1 UN-Number	
- ADR, ADN, IMDG, IATA	Void
- 14.2 UN proper shipping name	
- ADR, ADN, IMDG, IATA	Void
- 14.3 Transport hazard class(es)	
- ADR, ADN, IMDG, IATA	
- Class	Void
- 14.4 Packing group	
- ADR, IMDG, IATA	Void
- 14.5 Environmental hazards:	
- Marine pollutant:	No
- 14.6 Special precautions for user	Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
- UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
- Directive 2012/18/EU	
- Named dangerous substances - ANNEX I	None of the ingredients is listed.
- Seveso category	E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements	200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements	500 t
- National regulations	
- Water hazard class:	Water hazard class 1 (Self-assessment): slightly hazardous for water.
- 15.2 Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects.
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- Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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