

Safety data sheet  
According to REACH  
**METAL-TECH SG**


TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

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

- 1.1 Product identifier:** METAL-TECH  
**UFI:** F1U1-M9AV-2QJU-TRGT
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Adhesive for construction  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
THORTEX  
AMERICA  
COLLEGEVIL  
LE,PA 19426,  
USA
- 1.4 Emergency telephone number:** 1-610-831-0222 (Mon - Fri 08:00 - 17:00)

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**GB CLP Regulation:**  
Classification of this product has been carried out in accordance with GB CLP Regulation.  
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1B: Sensitisation, skin, Category 1B, H317
- 2.2 Label elements:**  
**GB CLP Regulation:**  
**Warning**
- 
- Hazard statements:**  
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Skin Irrit. 2: H315 - Causes skin irritation.  
Skin Sens. 1B: H317 - May cause an allergic skin reaction.
- Precautionary statements:**  
P264: Wash hands thoroughly after handling.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection.  
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313: If eye irritation persists: Get medical advice/attention.  
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.
- Supplementary information:**  
EUH205: Contains epoxy constituents. May produce an allergic reaction.
- Substances that contribute to the classification**  
Poly[oxy(methyl-1,2-ethanediyl)],  $\alpha$ -hydro- $\omega$ -hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

- 3.1 Substance:**

- CONTINUED ON NEXT PAGE -

Safety data sheet  
According to REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture composed of additives, pigments and resins

**Components:**

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

| Identification  | Chemical name/Classification   | Concentration |
|-----------------|--|---------------|
| CAS: 1675-54-3  | <b>Bis-[4-(2,3-epoxipropoxy)phenyl]propane</b><br>Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning   | 1 - <10 %<br> |
| CAS: 25068-38-6 | <b>reaction product: bisphenol-A-(epichlorhydrin) ( MW &lt; 700 )</b><br>Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning  | 1 - <10 %<br> |
| CAS: 72244-98-5 | <b>Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-ω-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether</b><br>Aquatic Chronic 3: H412; Skin Sens. 1B: H317 - Warning | 1 - <10 %<br> |

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

| Identification   | Specific concentration limit  |
|--|---|
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3                      | % (w/w) >=5: Skin Irrit. 2 - H315<br>% (w/w) >=5: Eye Irrit. 2 - H319 |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6 | % (w/w) >=5: Skin Irrit. 2 - H315<br>% (w/w) >=5: Eye Irrit. 2 - H319 |

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

- CONTINUED ON NEXT PAGE -

#### SECTION 5: FIREFIGHTING MEASURES (continued)

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

**Unsuitable extinguishing media:**

Non-applicable

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...).

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:**

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions:**

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Sweep up and shovel product or collect by other means and place in container for reuse (preferred) or disposal

**6.4 Reference to other sections:**

See sections 8 and 13.

#### SECTION 7: HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Preferably use aspiration for cleaning. Given the danger of the product by inhalation, any cleaning method that involves exposure to the product in this way (sweeping, etc.) is not recommended

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Safety data sheet  
According to REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 7: HANDLING AND STORAGE (continued)**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace:

Nuisance dust: Inhalable dust 10 mg/m<sup>3</sup> // Respirable dust 4 mg/m<sup>3</sup>

**DNEL (Workers):**

| Identification  |            | Short exposure |                | Long exposure          |                |
|---|------------|----------------|----------------|------------------------|----------------|
|   |            | Systemic       | Local          | Systemic               | Local          |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3<br>EC: 216-823-5                      | Oral       | Non-applicable | Non-applicable | Non-applicable         | Non-applicable |
|   | Dermal     | Non-applicable | Non-applicable | 0.75 mg/kg             | Non-applicable |
|   | Inhalation | Non-applicable | Non-applicable | 4.93 mg/m <sup>3</sup> | Non-applicable |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6<br>EC: 500-033-5 | Oral       | Non-applicable | Non-applicable | Non-applicable         | Non-applicable |
|   | Dermal     | Non-applicable | Non-applicable | 0.75 mg/kg             | Non-applicable |
|   | Inhalation | Non-applicable | Non-applicable | 4.93 mg/m <sup>3</sup> | Non-applicable |

**DNEL (General population):**

| Identification  |            | Short exposure |                | Long exposure          |                |
|---|------------|----------------|----------------|------------------------|----------------|
|   |            | Systemic       | Local          | Systemic               | Local          |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3<br>EC: 216-823-5                      | Oral       | Non-applicable | Non-applicable | 0.5 mg/kg              | Non-applicable |
|   | Dermal     | Non-applicable | Non-applicable | 0.0893 mg/kg           | Non-applicable |
|   | Inhalation | Non-applicable | Non-applicable | 0.87 mg/m <sup>3</sup> | Non-applicable |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6<br>EC: 500-033-5 | Oral       | Non-applicable | Non-applicable | 0.5 mg/kg              | Non-applicable |
|   | Dermal     | Non-applicable | Non-applicable | 0.0893 mg/kg           | Non-applicable |
|   | Inhalation | Non-applicable | Non-applicable | 0.87 mg/m <sup>3</sup> | Non-applicable |

**PNEC:**

| Identification  |              |             |                         |             |
|---|--------------|-------------|-------------------------|-------------|
|   |              |             |                         |             |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3<br>EC: 216-823-5                      | STP          | 10 mg/L     | Fresh water             | 0.006 mg/L  |
|   | Soil         | 0.065 mg/kg | Marine water            | 0.001 mg/L  |
|   | Intermittent | 0.018 mg/L  | Sediment (Fresh water)  | 0.341 mg/kg |
|   | Oral         | 0.011 g/kg  | Sediment (Marine water) | 0.034 mg/kg |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6<br>EC: 500-033-5 | STP          | 10 mg/L     | Fresh water             | 0.006 mg/L  |
|   | Soil         | 0.065 mg/kg | Marine water            | 0.001 mg/L  |
|   | Intermittent | 0.018 mg/L  | Sediment (Fresh water)  | 0.341 mg/kg |
|   | Oral         | 0.011 g/kg  | Sediment (Marine water) | 0.034 mg/kg |

**8.2 Exposure controls:**

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.


B.- Respiratory protection

Safety data sheet  
According to REACH  
**METAL-TECH SG**


TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**


| Pictogram   | PPE                               | Remarks  |
|---|-----------------------------------|--|
| <br>Mandatory respiratory tract protection | Filter mask for gases and vapours | Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment. |

**C.- Specific protection for the hands**

| Pictogram  | PPE                                   | Remarks  |
|--|---------------------------------------|--|
| <br>Mandatory hand protection | Protective gloves against minor risks | Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018 |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



**D.- Eye and face protection**

| Pictogram  | PPE   | Remarks   |
|--|---|---|
| <br>Mandatory face protection | Panoramic glasses against splash/projections. | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

**E.- Body protection**

| Pictogram | PPE                  | Remarks   |
|-----------|----------------------|---|
|           | Work clothing        | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |
|           | Anti-slip work shoes | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007                                 |

**F.- Additional emergency measures**

| Emergency measure   | Standards                                       | Emergency measure  | Standards                                      |
|---|---|--|--|
| <br>Emergency shower | ANSI Z358-1<br>ISO 3864-1:2011, ISO 3864-4:2011 | <br>Eyewash stations | DIN 12 899<br>ISO 3864-1:2011, ISO 3864-4:2011 |

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C: Solid  
Appearance: Paste  
Colour: Black, Grey  
Odour: Characteristic

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Odour threshold: Non-applicable \*

**Volatility:**

Boiling point at atmospheric pressure: Non-applicable \*

Vapour pressure at 20 °C: <500 Pa

Vapour pressure at 50 °C: Non-applicable \*

Evaporation rate at 20 °C: Non-applicable \*

**Product description:**

Density at 20 °C: Non-applicable \*

Relative density at 20 °C: 2.25

Dynamic viscosity at 20 °C: Non-applicable \*

Kinematic viscosity at 20 °C: Non-applicable \*

Kinematic viscosity at 40 °C: >20.5 mm<sup>2</sup>/s

Concentration: Non-applicable \*

pH: Non-applicable \*

Vapour density at 20 °C: Non-applicable \*

Partition coefficient n-octanol/water 20 °C: Non-applicable \*

Solubility in water at 20 °C: Non-applicable \*

Solubility properties: Insoluble in water

Decomposition temperature: Non-applicable \*

Melting point/freezing point: Non-applicable \*

**Flammability:**

Flash Point: >100 °C

Flammability (solid, gas): Non-applicable \*

Autoignition temperature: Non-applicable \*

Lower flammability limit: Non-applicable \*

Upper flammability limit: Non-applicable \*

**Explosive (Solid):**

Lower explosive limit: Non-applicable \*

Upper explosive limit: Non-applicable \*

**Particle characteristics:**

Median equivalent diameter: Non-applicable \*

**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties: Non-applicable \*

Oxidising properties: Non-applicable \*

Corrosive to metals: Non-applicable \*

Heat of combustion: Non-applicable \*

Aerosols-total percentage (by mass) of flammable components: Non-applicable \*

**Other safety characteristics:**

Surface tension at 20 °C: Non-applicable \*

Refraction index: Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

Safety data sheet  
According to REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 10: STABILITY AND REACTIVITY (continued)**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight       | Humidity       |
|--------------------|------------------|-------------------------|----------------|----------------|
| Not applicable     | Not applicable   | Not applicable          | Not applicable | Not applicable |

**10.5 Incompatible materials:**

| Acids              | Water          | Oxidising materials | Combustible materials | Others                        |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Not applicable      | Not applicable        | Avoid alkalis or strong bases |

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released carbon dioxide (CO ), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for consumption. For more information see section 3
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: Talc (3); Glass, oxide, chemicals (1); Bis-[4-(2,3-epoxypropoxy)phenyl]propane (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

- CONTINUED ON NEXT PAGE -

Safety data sheet  
According to REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

| Identification   | Acute toxicity  |             | Genus |
|--|-----------------|-------------|-------|
|  | LD50 oral       | LD50 dermal |       |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3  | LD50 oral       | >5000 mg/kg |       |
|  | LD50 dermal     | >5000 mg/kg |       |
|  | LC50 inhalation | >20 mg/L    |       |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6   | LD50 oral       | >5000 mg/kg |       |
|  | LD50 dermal     | >5000 mg/kg |       |
|  | LC50 inhalation | >5 mg/L     |       |
| Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-ω-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether<br>CAS: 72244-98-5 | LD50 oral       | >5000 mg/kg |       |
|  | LD50 dermal     | >5000 mg/kg |       |
|  | LC50 inhalation | >20 mg/L    |       |

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

**Acute toxicity:**

| Identification   | Concentration |                       | Species                 | Genus      |
|--|---------------|-----------------------|-------------------------|------------|
|  | LC50          | EC50                  |                         |            |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3  | LC50          | 2 mg/L (96 h)         | Oncorhynchus mykiss     | Fish       |
|  | EC50          | 1.7 mg/L (48 h)       | Daphnia magna           | Crustacean |
|  | EC50          | 9.4 mg/L (72 h)       | Scenedesmus subspicatus | Algae      |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6   | LC50          | >1 - 10 mg/L (96 h)   |                         | Fish       |
|  | EC50          | >1 - 10 mg/L (48 h)   |                         | Crustacean |
|  | EC50          | >1 - 10 mg/L (72 h)   |                         | Algae      |
| Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-ω-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether<br>CAS: 72244-98-5 | LC50          | >10 - 100 mg/L (96 h) |                         | Fish       |
|  | EC50          | >10 - 100 mg/L (48 h) |                         | Crustacean |
|  | EC50          | >10 - 100 mg/L (72 h) |                         | Algae      |

**Chronic toxicity:**

| Identification   | Concentration |                | Species       | Genus      |
|--|---------------|----------------|---------------|------------|
|  | NOEC          | Non-applicable |               |            |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3                      | NOEC          | Non-applicable |               |            |
|  | NOEC          | 0.3 mg/L       | Daphnia magna | Crustacean |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6 | NOEC          | Non-applicable |               |            |
|  | NOEC          | 0.3 mg/L       | Daphnia magna | Crustacean |

**12.2 Persistence and degradability:**

**Substance-specific information:**

- CONTINUED ON NEXT PAGE -

Safety data sheet  
According to REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: METAL-TECH-SG-V1.01.23-SDS

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

| Identification   | Degradability |                | Biodegradability |                |
|--|---------------|----------------|------------------|----------------|
|  | Parameter     | Value          | Parameter        | Value          |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3                      | BOD5          | Non-applicable | Concentration    | Non-applicable |
|  | COD           | Non-applicable | Period           | 28 days        |
|  | BOD5/COD      | Non-applicable | % Biodegradable  | 5 %            |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6 | BOD5          | Non-applicable | Concentration    | 100 mg/L       |
|  | COD           | Non-applicable | Period           | 28 days        |
|  | BOD5/COD      | Non-applicable | % Biodegradable  | 0 %            |

**12.3 Bioaccumulative potential:**

**Substance-specific information:**

| Identification   | Bioaccumulation potential |          |
|--|---------------------------|----------|
|  | Parameter                 | Value    |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3                      | BCF                       | 31       |
|  | Pow Log                   | 3        |
|  | Potential                 | Moderate |
| reaction product: bisphenol-A-(epichlorhydrin) ( MW < 700 )<br>CAS: 25068-38-6 | BCF                       | 4        |
|  | Pow Log                   | 2.8      |
|  | Potential                 | Low      |

**12.4 Mobility in soil:**

| Identification  | Absorption/desorption |                | Volatility |                |
|---|-----------------------|----------------|------------|----------------|
|   | Parameter             | Value          | Parameter  | Value          |
| Bis-[4-(2,3-epoxipropoxy)phenyl]propane<br>CAS: 1675-54-3 | Koc                   | 450            | Henry      | Non-applicable |
|   | Conclusion            | Low            | Dry soil   | Non-applicable |
|   | Surface tension       | Non-applicable | Moist soil | Non-applicable |

**12.5 Results of PBT and vPvB assessment:**

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

| Code      | Description  | Waste class |
|-----------|--|-------------|
| 08 04 09* | waste adhesives and sealants containing organic solvents or other hazardous substances | Dangerous   |

**Type of waste:**

HP14 Ecotoxic, HP4 Irritant – skin irritation and eye damage

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste Regulations 2011.

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated for transport (ADR/RID,IMDG,IATA)

**SECTION 15: REGULATORY INFORMATION**

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

- CONTINUED ON NEXT PAGE -

**SECTION 15: REGULATORY INFORMATION (continued)**

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Non-applicable
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

**The Control of Major Accident Hazards Regulations 2015:**

Non-applicable

**Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ....):**

Non-applicable

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

**Texts of the legislative phrases mentioned in section 2:**

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

H319: Causes serious eye irritation.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**GB CLP Regulation:**

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

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Skin Irrit. 2: H315 - Causes skin irritation.

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

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

**Classification procedure:**

Skin Irrit. 2: Calculation method

Skin Sens. 1B: Calculation method

Aquatic Chronic 3: Calculation method

Eye Irrit. 2: Calculation method

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

Safety data sheet  
According to UK REACH  
**METAL-TECH SG**

TDS Ref No. METAL-TECH-SG-V1.12.24-TDS

Version: JAN-23

**SECTION 16: OTHER INFORMATION (continued)**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at UK, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -