



Material Safety Data Sheet

1- IDENTIFICATION OF THE MATERIAL AND company :

Product Name: **Tri – floor 1010 Part B**
solvent free Epoxy coat

Company:

Trichem company

For construction chemicals

Factory : 6 October city – Developers area-

Aloula industrial park - Plot no.14

www.trichem-eg.com

Telefax : 02-38588109

Mobile : 011-195 48 267

For technical support please
call: 011 184 878 80

2. HAZARDOUS IDENTIFICATION :

Causes burns.

Harmful by inhalation and if swallowed. May
cause sensitization by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

	>= 25.0 - < 50.0	%	Xn: R20/22	100-51-6	202-859-9
Benzyl alcohol					
aminomethyl-3,5,5-			R52/53		
trimethylcyclohexylamine and 4,4'-					
Isopropylidenediphenol, oligomeric					
reaction products with 1-chloro-2,3-					
epoxypropan					

4. FIRST AID MEASURES:

Description of first aid measures

General advice: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Seek medical attention if symptoms occur or irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be immediately available.

Eye Contact: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

Ingestion: Do not induce vomiting. Give one cup (8 ounces or 240 ml) of water or milk if available and transport to a medical facility. Do not give anything by mouth unless the person is fully conscious.

Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of immediate medical attention and special treatment needed

Maintain adequate ventilation and oxygenation of the patient. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. If burn is present, treat as any thermal burn, after decontamination. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES :

Suitable extinguishing media

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Extinguishing Media to Avoid: Do not use direct water stream. May spread fire.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolic compounds. Nitrogen oxides. Carbon monoxide. Carbon dioxide. Ammonia.

Unusual Fire and Explosion Hazards: Container may vent and/or rupture due to fire. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures: Evacuate area. Only trained and properly protected personnel must be involved in clean-up operations. Keep upwind of spill. Ventilate area of leak or spill. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Contain spilled material if possible. Absorb with materials such as: Sand. Collect in suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE:

Handling

General Handling: Do not get in eyes, on skin, on clothing. Avoid breathing vapor or mist. Do not swallow. Avoid prolonged or repeated contact with skin. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling. See Section 8, EXPOSURE CONTROLS AND

PERSONAL PROTECTION.

Storage

Store in a cool, dry place. Do not store in: Aluminum. Copper.

Shelf life: Use within
24 Months

Storage temperature:
0 - 30 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Personal Protection

Eye/Face Protection: Use chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Chlorinated polyethylene. Natural rubber ("latex"). Neoprene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Butyl rubber. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

Engineering Controls

Ventilation: Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES :

Appearance	
Physical State	Liquid.
Color	Colorless
Odor	Amine.
Odor Threshold	No test data available
pH	8 - 11 Calculated
Melting Point	Not applicable
Freezing Point	No test data available
Boiling Point (760 mmHg)	> 200 °C Literature .
Flash Point - Closed Cup	> 100 °C Literature
Evaporation Rate (Butyl Acetate = 1)	No test data available
Flammability (solid, gas)	Not applicable to liquids

Flammable Limits In Air	Lower: No test data available Upper: No test data available
Vapor Pressure	< 5 hPa @ 50 °C Literature
Vapor Density (air = 1)	No test data available
Specific Gravity (H ₂ O = 1)	1.02 Calculated
Solubility in water (by weight)	Soluble
Partition coefficient, n-octanol/water (log Pow)	No data available for this product. See Section 12 for individual component data.
Autoignition Temperature	No test data available
Decomposition Temperature	No test data available
Kinematic Viscosity	No test data available
Explosive properties	No Assessment based on structural analysis
Oxidizing properties	No Assessment based on structural analysis

10. STABILITY AND REACTIVITY :

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Unstable at elevated temperatures.

Possibility of hazardous reactions

Polymerization will not occur.

Conditions to Avoid: Avoid temperatures above 250 °C. Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Avoid contact with: Strong acids. Strong oxidizers. Avoid contact with metals such as: Aluminum. Copper. Avoid unintended contact with: Halogenated hydrocarbons.

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Ammonia. Nitrogen oxides. Phenolics.

11. TOXICOLOGICAL INFORMATION:

Acute Toxicity

Ingestion

Low toxicity if swallowed. Swallowing may result in gastrointestinal irritation or ulceration. Swallowing may result in burns of the mouth and throat.

Single dose oral LD₅₀ has not been determined. Estimated. LD₅₀, rat > 1,030 mg/kg

Aspiration hazard

Based on physical properties, not likely to be an aspiration hazard.

Dermal

Prolonged or widespread skin contact may result in absorption of potentially harmful amounts. The dermal LD₅₀ has not been determined. Estimated. LD₅₀, rabbit 1,257 mg/kg

Inhalation

Excessive exposure may cause irritation to upper respiratory tract (nose and throat). May cause central nervous system depression. Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. Prolonged excessive exposure may cause serious adverse effects, even death.

The LC₅₀ has not been determined.

Eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Vapor may cause lacrimation (tears).

Skin corrosion/irritation

Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage.

Sensitization

Skin

A component in this mixture has caused allergic skin reactions in humans. Contains component(s) which have caused allergic skin sensitization in guinea pigs.

Respiratory

No relevant information found.

Repeated Dose Toxicity

For the component(s) tested: In animals, effects have been reported on the following organs: Central nervous system. Muscles. Thymus. Urinary tract. Respiratory tract. Liver.

Chronic Toxicity and Carcinogenicity

The data presented are for the following material Benzyl alcohol. Did not cause cancer in laboratory animals.

Developmental Toxicity

The data presented are for the following material: Benzyl alcohol. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Contains component(s) which did not cause birth defects in laboratory animals.

Reproductive Toxicity

No relevant data found.

Genetic Toxicology

The data presented are for the following material: Benzyl alcohol. In vitro genetic toxicity studies were negative in some cases and positive in other cases. Contains a component(s) which were negative in in vitro genetic toxicity studies. Contains component(s) which were negative in animal genetic toxicity studies.

12. ECOLOGICAL INFORMATION :

Data for Component: Benzyl alcohol

|| Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

Fish Acute & Prolonged Toxicity

|| LC50, Pimephales promelas (fathead minnow), static, 96 h: 460 mg/l

Aquatic Invertebrate Acute Toxicity

|| EC50, Daphnia magna (Water flea), 48 h: 230 mg/l

Aquatic Plant Toxicity

|| EC50, Pseudokirchneriella subcapitata (green algae), static, Growth rate inhibition, 72 h: 770 mg/l

Toxicity to Micro-organisms

|| EC50, OECD 209 Test; activated sludge, Respiration inhibition, 49 h: 2,100 mg/l

Aquatic Invertebrates Chronic Toxicity Value

|| Daphnia magna (Water flea), semi-static test, 72 d, EC50, NOEC: 51 mg/l

Fish Acute & Prolonged Toxicity

|| LL50, rainbow trout (Oncorhynchus mykiss), static test, 96 h: 70.7 mg/l

Aquatic Invertebrate Acute Toxicity

|| EL50, water flea Daphnia magna, static test, 48 h, immobilization: 11.1 mg/l

Aquatic Plant Toxicity

|| EL50, Pseudokirchneriella subcapitata (green algae), static test, Growth inhibition (cell density reduction), 72 h: 79.4 mg/l

Toxicity to Micro-organisms

|| EC50, activated sludge test (OECD 209); activated sludge, aerobic, 3 h: > 1,000 mg/l

13. DISPOSAL CONSIDERATIONS :

This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing

hazardous waste. For used, contaminated and residual materials additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water.

14. TRANSPORT INFORMATION :

ROAD & RAIL

Proper Shipping Name: ISOPHORONEDIAMINE, MIXTURE

Hazard Class: 8ID Number: UN2289 Packing Group: PG III

Classification: C7

Hazard identification No: 80

Environmental Hazard: No

OCEAN

Proper Shipping Name: ISOPHORONEDIAMINE, MIXTURE

Hazard Class: 8ID Number: UN2289 Packing Group: PG III

AIR

Proper Shipping Name: ISOPHORONEDIAMINE, MIXTURE

Hazard Class: 8ID Number: UN2289 Packing Group: PG III

Cargo Packing Instruction: 856

Passenger Packing Instruction: 852

Environmental Hazard: No

15. REGULATORY INFORMATION:

Classification and User Label Information

Hazard Symbol:

C - Corrosive.

Risk Phrases :

R34 - Causes burns.

R20/22 - Harmful by inhalation and if swallowed. R43 - May cause sensitization by skin contact.

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases :

S24/25 - Avoid contact with skin and eyes.

- In case of contact with eyes, rinse immediately with plenty of water and seek S26 medical advice.

S28 - After contact with skin, wash immediately with plenty of water and soap.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

- In case of accident or if you feel unwell, seek medical advice immediately

S45 (show the label where

possible).

- Avoid release to the environment. Refer to special instructions/Safety data

S61 sheets.

Contains: Benzyl alcohol
 Reaction products of 3-aminomethyl-3,5,5-trimethylcyclohexylamine
 and 4,4'-
 Isopropylidenediphenol, oligomeric reaction products with 1-chloro-
 2,3-
 epoxypropane

16. OTHER INFORMATION :**Risk-phrases in the Composition section**

R20/22	Harmful by inhalation and if swallowed.
R34	Causes burns.
R41	Risk of serious damage to eyes.
R43	May cause sensitization by skin contact.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Revision

Identification Number: 1017067 / A305 / Issue Date 03/24/2014 / Version: 3.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

N/A	Not available
W/W	Weight/Weight
OEL	Occupational Exposure Limit
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG	Dow Industrial Hygiene Guideline
WEEL	Workplace Environmental Exposure Level
HAZ_DES	Hazard Designation

Trichem urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs,