chemcement

Bonding Application Adhesives

SAFETY DATA SHEET – CHEM Cement Hardener

CHEM Trust Solutions Safety Data Sheet according to 91/155/EC Date Revised: 09.01.2023 Previous Revision Date: 01.02.2013

1. Product and Company Identification

Use: Bonding Agent, Curing Agent

Isoplus A306

Company:

CHEM TRUST Solutions 39 Kelly Road, The Palisades, Unit A7, Jet Park, Boksburg, Gauteng, South Africa Telephone: +27 82 326 8277 or +27 82 262 4267

Emergency Information:

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2. Composition/Information on Ingredients

Chemical Name	CAS No.	Wt % Less than	Exposure Guidelines					
			ACGIH TWA	STEL	OSHA TWA	Ceil	Units	Skin
Methylene Chloride Triphenylmethane-4,4',4'- triisocyanate	75-09-02 2422-91-5	70 30	50	75 N.E.	50	N.E. N.E.	ppm ppm	

N.E. = Not Established S = Skin C = Ceiling

3. Hazard Identification

Brown liquid, with solvent odour. Harmful if absorbed through skin. May cause skin and eye irritation. May cause respiratory tract irritation. Vapour harmful; may affect the brain or nervous system causing dizziness, headache or nausea. May be fatal if inhaled in confined spaces.

4. First Aid Measures

General advice: Immediately remove contaminated clothing.

Inhalation: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

Eye Contact: Flush eyes immediately with large amounts of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

Skin Contact: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash contaminated skin areas with soap and water. Get medical attention if symptoms occur.

Ingestion If swallowed, do not induce vomiting. Give victim one or two glasses of water or milk. Call a physician or poison control center immediately for further instructions. Never give anything by mouth to an unconscious person.

Note to physician:

Hazards: Symptoms may appear later.

Treatment: Treat according to symptoms (decontamination, vital functions). There is no known specific antidote for polymeric isocyanates. Administer corticosteroid dose aerosol to prevent pulmonary odema (e.g. dexamethazone).

5. Fire Fighting Measures

Suitable extinguishing media:

Dry extinguishing media, carbon dioxide (CO2), foam, water fog.

Specific Hazards:

Carbon dioxide, carbon monoxide, hydrogen cyanide, hydrogen chloride, phosgene, nitrogen oxides. The substances mentioned can be released in case of fire.

Special protective equipment:

Wear full firefighting protective clothing, including self-contained breathing apparatus. Water spray may be ineffective. If water is used, fog nozzles are preferable. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

Further Information:

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

6. Accidental Release Measures

Personal Precautions:

Use personal protective clothing. Ensure adequate ventilation. Use self-contained breathing equipment. Keep non-essential personnel a safe distance away from the spill area.

Environmental Precautions:

Do not empty into drains. Do not discharge into the soil or subsoil. Notify appropriate authorities if necessary.

Methods for cleaning up or taking up:

Before attempting clean-up, refer to hazard caution information in other sections of this form.

For large amounts: Pump off product.

For residues: Contain and remove with inert absorbent material and non-sparking tools. Avoid contact.

7. Handling and Storage

Handling:

Provide suitable ventilation at the workplace. Avoid aerosol formation. Wear respiratory protection when spraying. Protect against moisture. Products freshly manufactured from isocyanates may contain incompletely reacted isocyanates and other dangerous substances. Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapour or spray mists. Do not handle until all safety precautions have been read and understood.

Empty containers should not be re-used. Because empty containers may retain product residue, keep away from heat. Do not smoke where this product is used or stored.

Warning:

Application of this product within a tank or other confined space must comply with the requirements of the OSHA Permit-Required Confined Spaces Standard, 29 CFR 1910.146 in USA.

Storage:

Keep away from water. Keep away from foods and animal feeds. Keep away from acids and bases. Store only in well ventilated areas. Do not puncture, drag, or slide container. Keep container closed when not in use. Formation of carbon dioxide (CO2) and build up of pressure is possible if contaminated by moisture during use. Therefore, danger of bursting if moisture contaminated drums are sealed gastight. Partially used drums should be flushed with dry nitrogen before resealing.

8. Exposure Controls and Personal Protection

Components with workplace control parameters:

2422-91-5	Triphenylmethane-4,4',4'-triisocyanate
101-68-8	Diphenylmethane-4,4'-diisocyanate
75-09-02	Methylene Chloride (Dichloromethane)

Personal protective equipment:

Respiratory protection:

Use a combination filter EN141 Type ABEK (gases/vapours of organic, inorganic, acid inorganic and alkaline compounds) or NIOSH/MSHA approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapour if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

Hand protection:

Chemically resistant protective gloves are recommended (EN 374). Suitable materials with direct prolonged contact in accordance with Protective Index 6, corresponding to > 480 minutes of permeation time according to EN 374: Butyl Rubber (IIR) – 0,7 mm coating thickness Nitrile Rubber (NBR) – 0,4 mm coating thickness Chloroprene Rubber (CR) – 0,5 mm coating thickness

Unsuitable materials: Polyvinyl Chloride (PVC) - 0,7 mm coating thickness Natural Rubber (or Latex Disposable) - 0,1 mm thickness

Eye Protection: Safety glasses with side shields (EN166) where splashing may occur.

Body Protection: Safety shoes (eg to DIN-EN 346).

General safety and hygiene measures:

Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapours are heavier than air and collect in lower levels of the work area. With products freshly manufactured from isocyanates, body protection and

chemically resistant gloves are recommended. Product may stain the skin. Wash hands thoroughly before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored.

9. Physical and Chemical Properties

Form: Liquid Colour: Brown Odour: Solvent

Boiling Point: 40°C (Solvent) Freezing Point: Not determined Evaporation Rate: Slower than Ether

Flash Point: >204°C Ignition Temperature: > 600°C Lower Explosive Limit: Not determined Upper Explosive Limit: Not determined Vapour Pressure: Not determined

Density: 1,29 g/cm3 (25°C)

Viscosity: 5 mPa.s (25°C) DIN 53018

Solubility in Water: Insoluble

Volatile by Weight: 70,0% Volatile by Volume: 67,9%

10. Stability and Reactivity

Substances to avoid: High temperatures. Sources of ignition. Strong oxidizers, alcohols, amines, bases, water.

Hazardous reactions:

On contact with water, gaseous decomposition products are formed which cause a build-up of pressure in tightly closed containers. Risk of bursting. Reacts with substances which contain active hydrogen. However, hazardous polymerization will not occur under normal conditions.

Stability:

This product is stable under normal storage conditions.

11. Toxicological Information

Primary skin irritation: Irritant

Primary irritations of the mucous membrane: Irritant

No other product toxicological information is available.

12. Ecological Information

Persistence and Degradability:

Assessment: The product is unstable and will react with water. Experience shows the product to be non degradable. Marine pollutant.

Other adverse effects: Absorbable organically-bound halogen (AOX): This product contains organically-bound halogen. Contains no substances that are detrimental to the ozone layer.

No other ecotoxicological information.

13. Disposal Considerations

Should be carried in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. Transport Information

DOT Proper Shipping Name DOT Hazard Class DOT UN/NA Number Emergency Response Guide Number Packing Group Isocyanate Solution in Methylene Chloride 6.1 Poisonous UN 1593 26 III

15. Regulatory Information

Regulations of the European Union (Labelling) / National Legislation/ Regulations

<u>Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and</u> administrative provisions relating to the classification, packaging and labeling of dangerous substances:

Hazard Symbols: Harmful Xn	Substances which can have limited effects on health.
R-phrase(s): R40/20/21/2	Harmful: possible risk of irreversible effects through inhalation, in contact with skin
	and if swallowed.
S-phrase(s):	
S23	Do not breathe vapour/spray.
S24	Avoid contact with skin.
S36/37	Wear suitable protective clothing and gloves.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

South Africa Regulations

This product contains the following substances subject to the requirements of Schedule 5.1 of the Occupational Health and Safety Act No. 85 of 1993 Section 43 and listed in Hazardous Chemical Substances Guidelines Annexure 1 Table 3.

Methylene Chloride CAS Number 75-09-02 Wt % Less Than 70

US Federal Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

SARA Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorisation Act of 1986 and 40 CFR Part 372: Methylene Chloride CAS Number 75-09-02 Wt % Less Than 70

Toxic Substances Control Act:

Inventory Status: The chemical substances in this product are on the TSCA Section 8 Inventory.

Other International Regulations

Canadian WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

Canadian WHMIS Class: No information available.

16. Other Information

Recommended Use: Bonding Agent. Curing Agent (Hardener) for Natural and Synthetic Rubber and Polyurethane Adhesives.

Reason for Revision: Update of Section 15 – Regulatory Information.

The information provided herein is based on the latest available state of our knowledge and experience with the product and does not guarantee certain properties. The purpose of this safety data sheet is to describe the product in terms of its safety and handling requirements.

As CHEM TRUST Solutions has no control as to the way in which others may use the information, recipients of our product must take responsibility for observing existing local and international laws and regulations.