

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**PRODUCT NAME: TRIPOR COMPONENT B**

Address/Phone No. CFS Fibreglass
Unit A United Downs Ind. Park.
Redruth
Cornwall. U.K. TR16 5HY
(0) (44) 1209 821028 FAX: (0) (44) 1209 822192

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product description:

Diisocyanato diphenylmethane (MDI) based composition.

HAZARDOUS INGREDIENT(S)	CAS No.	Symbol	R phrases
Diphenylmethane - 4, 4'-Diisocyanate, blend of Isomers & Homologues.	009016-87-9	Xn	R20,36/37/38,42/43

3. HAZARDS IDENTIFICATION

Harmful by inhalation: This product is a respiratory irritant and potential respiratory sensitizer: repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons. Irritating to eyes and skin.

4. FIRST-AID MEASURES

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention. Treatment is symptomatic for primary irritation or bronchospasm.

Skin Contact: Wash immediately with water followed by soap and water. If symptoms persist, obtain medical attention. Contaminated clothing should be thoroughly cleaned.

Eye Contact: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain medical attention.

Ingestion: Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Do not induce vomiting. Obtain immediate medical attention.

Further Medical Treatment:

Symptomatic treatment and supportive therapy as indicated.

5. FIRE FIGHTING MEASURES

Not classed as flammable.

If involved in a fire, it may emit noxious and toxic fumes. Due to reaction with water producing CO₂ gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed.

Combustion products: Carbon monoxide, carbon dioxide, nitrogen oxides, MDI, HCN.

Extinguishing Media: foam, CO₂ or dry powder. Water may be used if no other available and then in copious quantities. Reaction between water and hot isocyanate may be vigorous.

Fire Fighting Protective Equipment: Suitable respiratory protection with full face piece and positive air supply. PVC Boots, gloves, and protective clothing should be worn.

6. ACCIDENTAL RELEASE MEASURES

Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains. Contain and absorb large spillages onto an inert, non flammable absorbent carrier. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area clean with liquid decontaminant. Test atmosphere for MDI vapour. Neutralise small spillages with decontaminant, Remove and dispose of residues.

7. HANDLING AND STORAGE

7.1 HANDLING

Provide adequate ventilation, including local extraction, to ensure that the defined occupational exposure limit is not exceeded. The efficiency of the ventilation must be monitored regularly because of the possibility of blockage. Keep stocks of decontaminant readily available.

7.2 STORAGE

Keep containers properly sealed and store indoors in a well ventilated area. Keep away from moisture. Due to reaction with water producing CO₂ gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed .
Storage Temperature: 15 - 25°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear suitable protective clothing, gloves and eye/face protection, no eating drinking or smoking in or close to the work area.

Respirators: Suitable respiratory equipment with positive air supply should be used in cases of insufficient ventilation or where operational procedures demand it.

Eye protection: Chemical goggles. Full face shield in addition if splashing is possible.

Gloves: Neoprene or butyl rubber is recommended.

Other: Overalls (Preferably heavy cotton)

Occupational Exposure Limits

For Diphenylmethane diisocyanate refer to current edition of HSE guidance note EH40 on occupational exposure under isocyanate

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid

Odour : earthy

pH (Value) : Not applicable.

Boiling Point (°C) : Not applicable.

Flash Point (°C) : 200 - 250

Vapour Pressure (mm Hg) : < 0.0003 (at 25 °C)

Solubility (Water) : reacts with water.

Solubility (Other) : most organic solvents: soluble.

10. STABILITY AND REACTIVITY

Incompatible materials and conditions: Reaction with water (moisture) produces CO₂-gas. Exothermic reaction with materials containing active hydrogen groups. See 'Fire and Explosion Hazards'.

Hazardous Reactions: Stable at room temperature

Hazardous Decomposition Product(s): Highly unlikely under normal industrial use.

11. TOXICOLOGICAL INFORMATION

This health hazard assessment is based on a consideration of the composition of this product.

Inhalation: This product is a respiratory irritant and potential respiratory sensitiser: repeated inhalation of vapour or aerosol at levels above the occupational exposure limit could cause respiratory sensitisation. Symptoms may include irritation to the eyes, nose, throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitised persons. Median Lethal Concentration (4 hrs) (aerosol). : 370 mg/M³ (rat).

Skin Contact: Moderate irritant. Repeated and/or prolonged contact may cause skin sensitisation. Animal studies have shown that respiratory sensitisation can be induced by skin contact with known respiratory sensitisers including diisocyanates. These results emphasise the need for

protective clothing including gloves to be worn at all times when handling these chemicals or in maintenance work.

Eye Contact: The vapour and liquid are irritant.

Ingestion: Low oral toxicity. Ingestion may cause irritation of the gastrointestinal tract. Oral Median Lethal Dose > 5000 mg/kg (rat).

Long term

Exposure: There are reports that chronic exposure by inhalation may result in permanent decreases in lung function. Rats have been exposed for two years to an aerosol of polymeric MDI which resulted in chronic pulmonary irritation at high concentrations. The prolonged irritation led to the formation of tumours in the lungs of a small proportion of the rats exposed to 6 mg/M³. There were no tumours at 1 mg/M³ and no effects at 0.2 mg/M³. In the absence of prolonged high exposure leading to chronic irritation and lung damage it is highly unlikely that tumours could occur, although these results reinforce the need to observe the recommended safety precautions and occupational exposure limit when working with MDI.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

By considering the production and use of the substance, it is unlikely that significant environmental exposure in the air or water will arise.

Persistence and Degradation

Immiscible with water, but will react with water to produce inert and non-biodegradable solids.

Toxicity

LC0 (zebra fish) > 1000 mg/l

EC50 (Daphnia magna) (24 hour) > 1000 mg/l

EC50 (E. Coli) > 100 mg/l

Effect on Effluent Treatment

No data.

13. DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimised wherever possible. Disposal should be in accordance with local, state or national legislation. Untreated material is not suitable for disposal. Waste, even small quantities, should never be poured down drains, sewers or water courses. Small quantities and empty drums - pretreat with decontaminant or waste polyol to neutralise prior to disposal.

Large quantities: destruction by controlled pyrolysis with scrubbing and neutralisation of the vapours, using incinerators specifically designed for the destruction of noxious chemical waste.

14. TRANSPORT INFORMATION

The UN Committee of Experts on the Transport of Dangerous Goods deleted UN 2489 Diphenylmethane-4,4' diisocyanate from Class 6.1., at the 18th session 28th November - 7th December 1994. It will take time for the various national and international authorities to implement this change in their regulations.

The product is therefore not classified as hazardous for transport purposes.

15. REGULATORY INFORMATION

EEC Classification: HARMFUL

Hazard Symbol: Xn

Risk Phrases: R20: Harmful by inhalation.

R36/37/38: Irritating to eyes, respiratory system and skin.

R42/43: May cause sensitisation by inhalation or skin contact

Safety Phrases: S22: Do not breathe dust.

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

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. OTHER INFORMATION

This data sheet was prepared in accordance with Directive 93/112/EC.

Must only be mixed with the relevant Tripor Component A. Must be kept in original containers and not decanted.

Given thorough and adequate mixing the fully reacted product derived from the proper use of Tripor Components A and B is not considered hazardous. However the reaction develops exothermic heat and the liquid chemical mixture should be handled accordingly.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.

APPENDIX - I.S.O.P.A. RECOMMENDATIONS FOR DECONTAMINANT

APPENDIX 1

Recommended Formulations For Decontamination Solutions

1. Formulation

Weight or Volume %

Water	90-95
Concentrated ammonia* solution	3-8
Liquid detergent	0.2-2

2. Formulation

Weight or Volume %

Water	90-95
Sodium carbonate	5-10
Liquid detergent	0.2-2

For routine operations, for example, decontamination of protective equipment, tools and parts of machines, the following formulation is more effective. The solution is flammable and should be handled accordingly.

2. Formulation

Weight or Volume %

An alcohol (ethanol, isopropanol or butanol)	50
Water	45
Concentrated ammonia* solution	5

* Care should be taken with ammonia since it is a hazardous material

