

TRADE GRADE PRODUCTS LTD

MATERIAL SAFETY DATA SHEET

1. Identification of the substance / preparation and company.

Product name	TradePUR 232
Supplier	Trade Grade Products Limited
Address	2 Thorne Way Woolsbridge Industrial Park Three Legged Cross Wimborne Dorset BH21 6FB
Emergency telephone number	01202 820177

2. Composition / Information on Ingredients.

<u>Material description</u>	<u>CAS No.</u>	<u>EINECS No.</u>	<u>% Content</u>	<u>Health (class)</u>	<u>Risk (R No.)</u>
Mixture of Diphenylmethane-4,4'-Diisocyanate (MDI) with polymeric constituents.	101-68-8	202-966-0	14-16 free isocyanate	Xn	R20 R36/37/38 R42/43
Dichloromethane	75-09-2	200-838-9	26 (Approx)	Xn	R40
N-Methyl-2-Pyrrolidone	872-50-4	212-828-1	1 - 10	Xi	R36/38

3. Hazards Identification.

Main hazards	<p>Possible risk of irreversible effects.</p> <p>Methylene Chloride is not believed to pose a measurable carcinogenic effect when handled correctly.</p> <p>Irritating to eyes, respiratory system and skin.</p> <p>May cause sensitisation by inhalation and skin contact.</p>
--------------	---

4. First Aid Measures (Action).

Skin contact	Remove all contaminated clothing and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.
Eye contact	Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
Ingestion	DO NOT induce vomiting. If conscious give 1 pint of water to drink immediately. If the casualty is unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital immediately.
Inhalation	Remove casualty from exposure ensuring your own safety whilst doing so. If the casualty is unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital immediately.

5. Fire-fighting Measures.

Extinguishing media	Carbon dioxide, alcohol or polymer foam, dry chemical powder. Do not use water.
Exposure hazard	In combustion possible formation of carbon monoxide, nitrogen oxide, isocyanate vapour and traces of hydrogen cyanide.
Personal protection	Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures.

Personal precautions	Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers 'leak-side up' to prevent the escape of liquid.
Environmental precautions	Prevent the liquid entering drains, sewers or waterways. If the substance enters drains, sewers, etc inform the police or fire service. Contain the spillage using bunding.
Clean up of spillages	Absorb into dry earth, sand, sawdust, etc. and transfer to a labelled, open top container. Keep open and wet for 7 to 14 days; the waste can then be disposed of at an approved landfill site. Wash the spillage site with large amounts of clean water.

7. Handling and Storage.

Handling	Ensure that there is sufficient ventilation in the work place. Avoid direct contact with the substance.
Storage	Store in a cool, dry, well ventilated place. Keep containers tightly closed.
Packaging materials	Must only be stored and used in original packaging.

8. Exposure Controls / Personal Protection.

Exposure limits		
Diphenylmethane-4,4'-Diisocyanate	<u>STD</u>	
	TWA (8 Hours)	0.02 mg/m ³
	STEL (15 min)	0.07 mg/m ³
N-Methyl-2-Pyrrolidone	TWA	103 mg/m ³
	STEL	309 mg/m ³
Ventilation	Ensure good ventilation by means of local extraction at point of use.	
Respiratory protection	Wear respiratory protection where there is a risk of exposure to concentrations above OEL (occupational exposure limit). Self-contained breathing apparatus must be available for emergencies.	
Hand protection	Wear plastic or rubber gloves.	
Eye protection	Wear chemical resistant goggles.	
Skin protection	Wear protective clothing with elasticised cuffs and closed neck. Boots made of PVC. Ensure safety shower is available for emergencies.	
Personal hygiene	Apply skin protection crème before handling. Remove contaminated clothing. Wash hands before breaks and at the end of work.	

9. Physical and Chemical Properties.

Appearance	Light amber or tinted.
Odour	Chlorinated hydrocarbons.
Specific gravity	1.17 @ 20°C
Viscosity	200 cps @ 20°C

10. Stability and Reactivity.

Stability	Stable and un-reactive at normal temperatures and conditions.
Thermal decomposition	Polymerises at about 260°C with evolution of CO ² .
Materials to avoid	Amines, alcohols, acids and alkalis. Reacts with water forming CO ² . Do not use aluminium in the construction of any spray equipment (pipework, guns, etc) as it may react with solvents in the adhesive.
Hazardous decomposition products	In combustion, emits toxic fumes of carbon monoxide and carbon dioxide.

11. Toxicological Information.

LD50 Oral (rat) is greater than 500 mg/kg.

Effect on eyes	Strong irritation, lacrymation, burning.
Effect on skin	Dehydration, possible sensitisation.

12. Ecological Information.

Mobility	Dichloromethane's potential for mobility in soil is high.
Degradability	Dichloromethane is expected to biodegrade only very slowly (environment), and biodegradation rate is expected to increase in soil and water. Degradation is expected in the atmospheric environment.
Aquatic toxicity	Dichloromethane: Acute LC50 for Flathead Minnow 193 – 300 mg/L Acute LC50 for Flea Daphnia magna is 27 mg/L Material is harmful to aquatic organisms. Isocyanates when in contact with water evolve CO ² and form insoluble solids. Do not allow material to enter sewers, drains or water courses, should this happen; notify the relevant authority.

13. Disposal Consideration.

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

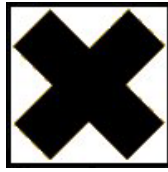
Disposal of the wet adhesive is governed by the Control of Pollution (Special Wastes) Regulations 1980.

14. Transport Information.

UK:	UN2810, Packing class 6.1, Transport category 3.
IMO:	PSN Toxic liquid, organic, nos, (Dichloromethane), UN2810, Class 6.1, Group III Flashpoint 70°C EmS 6.1-02
ADR:	2810, Toxic liquid, organic, nos, (Dichloromethane), 6.1, 25°C, ADR

15. Regulatory Information.

CHIP Label for supply



HARMFUL

CHIP Risk phrases	R36/37/38 R42/43	Irritating to eyes, respiratory system and skin. May cause sensitisation by inhalation and skin contact.
CHIP Safety phrases	S23 S24 S36/37 S45 S63	Do not breathe vapour / fumes. Avoid contact with skin. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label if possible). In case of accident by inhalation, remove casualty to fresh air and keep at rest.
Regulatory references	CHIP Regulations 1996 Health and Safety at Work Act 1974 COSHH Regulations 1994	

16. Other Information.

Other information	This adhesive should be used in accordance with the supplier's recommendations. The information provided in this data sheet is based on our current knowledge of the product and is intended to describe it for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Information sources	CHIP Approved supply list. CHIP Approved guide to the classification and labelling of substances and preparations dangerous for supply. CHIP Approved carriage list. Raw materials suppliers literature. Occupational exposure limits 1994 (EH40).