

MATERIAL SAFETY DATA SHEET METPROTECT 1

1- IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product name: METPROTECT 1
 Product no: METPROTECT 1
 Supplier: Ecosea Ltd
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2- COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No	Content	Classification
SOLVENT NAPHTA (petroleum), light arom Low boiling point naphtha	265-199-0	64742-95-6	10-20%	Xn – N - R10-37-51/53-65
O-XYLEN [1] P-XYLEN [2] M-XYLEN [3] XYLENE [4] ID no 601-022-00-9	215-535-7	1330-20-7	5-10%	Xn – Xi – R10-20/21-38
MODIFIED MDI		53862-89-8	20-25%	Xn – Xi – R20-36/37/38 – 42/43
4,4#-METHYLENEDIPHENYL DIISOCYANATE [1]; METHYLENEDIPHENYL DIISOCYANATE [2]; ISOCYANATOBENZYL)PHENYL ISOCYANATE [3]; METHYLENE Id no 615-005-00-9	202-966-0	101-68-8	10-20%	Xn – Xi – R20-36/37/38- 42/43
DIFENYLMETHAANDIISOCYANAAT, ISOMEREN EN HOMOLOGEN		9016-87-9	10-20%	Xn – Xi – R 20-36/37/38- 42/43
MODIFIED MDI		25766-14-7	5-10%	Xn – Xi – R20-36/37/38- 42/43
4-ISOCYANATOSULPHONYLTOLUENE; TOSYL ISOCYANATE Id no 615-012-00-7	223-810-8	4083-64-1	0-1%	Xi – R14-36/37/38-42

3- HAZARDS IDENTIFICATION

Flammable. Harmful by inhalation and in contact with skin. May cause sensitization by inhalation and skin contact. Irritating to eyes, respiratory system and skin. Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment. Repeated and prolonged exposure may cause skin irritation and dermatitis due to degreasing properties of the product.

4- FIRST-AID MEASURES

GENERAL ADVICE

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.



MATERIAL SAFETY DATA SHEET

METPROTECT 1

INHALATION

Take victim to fresh air, in a quiet place, in a half laying position and if necessary take medical advice.

INGESTION

Do not induce vomiting. Rinse mouth, do not drink anything, keep quiet, and go immediately to hospital or doctor.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

EYE CONTACT

Promptly wash eyes with plenty of water while lifting the eye lids after taking off contact lenses. Continue to rinse for at least 20 minutes. Immediately take medical advice.

5- FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical powder, alcohol resistant foam, carbon dioxide (CO₂), sand, earth. DO NOT use water jet.

SPECIAL FIRE FIGHTING PROCEDURES

Cool containers / tanks with spray water if possible.

SPECIFIC HAZARDS

In case of fire, product decomposes in: Carbon oxides (CO and CO₂) and smokes.

PROTECTIVE MEASURES IN FIRE

Use a self contained breathing apparatus and also a protective suit.

6- ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Evacuate personnel to a safe area. Remove all sources of ignition. Ensure adequate ventilation. Concerning personal protective equipment to use, see item 8.

ENVIRONMENTAL PRECAUTIONS

Stop leak without risks if possible. Dike and contain spill. Do not allow material to contaminate ground water system. Concerning disposal elimination after cleaning, see item 13.

SPILL CLEAN UP METHODS

Soak up with absorbent material (for example sand, sawdust, neutral absorbent granules, silica gel). Shovel into suitable and closed container for disposal. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

7- HANDLING AND STORAGE

HANDLING

Precautions: Do not eat, drink and do not smoke in areas where the product is used. Avoid all eyes and skin contact and do not breathe vapour and mist. Wear personal protective equipment (see item 8).

Technical conditions: Explosion-free electrical equipment and lighting with earth. Do not use compressed air to fill, handle and work up. Avoid static electricity discharges.

Safe handling advice(s): Opened containers must be carefully closed and kept upright to avoid leakage.

STORAGE

Precautions: Keep container tightly closed and in a well ventilated place.

Storage conditions: Keep container tightly closed and at a temperature not exceeding 35°C. Keep away from sources of ignition – No smoking. Store in a well ventilated place.

Separation of incompatible products: Keep away from: strong acids, strong bases and oxidising compounds.

Packaging / tank material: stainless steel, mild steel.

8- EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES(S)

Ensure adequate ventilation, especially in confined areas.

MATERIAL SAFETY DATA SHEET METPROTECT 1

EXPOSURE LIMITS

O-Xylene [1] P-Xylene [2] M-Xylene [3] Xylene [4]

MAC (TWA) ppm = 50

MAC (TWA) mg = 221

MAC (STEL) ppm = 100

MAC (STEL) mg = 442

4,4#-Methylenediphenyl Diisocyanate [1]; Diphenylmethane-4,4#-Diisocyanate[1]; 2,2#-Mehtylenediphenyl Diisocyanate [2]; Diphenylmethane-2,2#-Diisocyanate[2]; O-(P-Isocyanatobenzyl)Phenyl Isocyanate [3]; Diphenylmethane-2,4#-Diisocyanate [3; Methylene

MAC (TWA) ppm = 0.005

MAC (TWA) mg = 0.051

PROTECTIVE EQUIPMENT



RESPIRATORY EQUIPMENT

In case of insufficient ventilation, wear suitable respiratory equipment (breathing apparatus with filter A)

HAND PROTECTION

Wear suitable gloves.

EYE PROTECTION

Safety glasses or face shield.

HYGIENE MEASURES

Keep away from food, drink and animal feed. Keep away from food and drink.

SKIN PROTECTION

Wear suitable protective clothing.

9- PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOUR	Aluminium
ODOUR	Characteristic
SOLUBILITY	In water: Immiscible In fat: not applicable In solvent: Soluble in most organic solvents.
RELATIVE DENSITY	(water=1) +- 1.1g/cm ³
FLASH POINT (°C)	> 21°C
EXPLOSION LIMIT	%(V/V) 1-6, based on Xylene
VISCOSITY	70ku
BOILING POINT/RANGE	Not determined.
OTHERS	VOC: g/L

10- STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use as per section 7.

CONDITIONS TO AVOID

Do not expose at temperatures above 35°C

MATERIALS TO AVOID

Avoid certain plastics which are soluble in product. Reacts violently with: strong acids, strong bases and oxidising compounds.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.

11- TOXICOLOGICAL INFORMATION

GENERAL INFORMATION

Periodical medical is recommended in function of exposition measures

INHALATION

Irritating to the respiratory system, may cause throat pain and cough.

INGESTION

May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

SKIN CONTACT

Intensive skin contact, may cause skin problems (contact dermatitis)

EYE CONTACT

Mild eye irritation (pain, redness)

SENSITISATION

May cause sensitisation by inhalation

CHRONIC TOXICITY

Did not show carcinogenic, teratogenic or mutagenic effects in animal experiments.

SPECIFIC EFFECTS

Use of alcoholic beverages may enhance toxic effects.

12- ECOLOGICAL INFORMATION

ECOTOXICITY

Product may not flow into sewer or superficial water.

PERSISTENCE AND DEGRADABILITY

Product has only a limited biodegradability in soil and water.

13- DISPOSAL CONSIDERATIONS

WASTE / UNUSED PRODUCTS

Collect all waste in suitable and labelled containers and dispose according to local legislation.

CONTAMINATED PACKAGING

Do not burn, or use a cutting torch on the empty drum. Offer rinsed packaging to local recycling facilities.

14- TRANSPORT INFORMATION

UK ROAD CLASS	3		
PROPER SHIPPING NAME	FLAMMABLE LIQUID, N.O.S. PAINTS		
ROAD UN NO.	1263	UK ROAD PACK GR.	III
ADR CLASS NO.	3		
ADR CLASS	Class 9: Flammable liquid, N.O.S. paint		
ADR PACK GROUP	III	ADR LABEL NO.	3
HAZCHEM CODE		CEFIC TEC(R) NO.	
RID CLASS NO.	3	RID PACK GROUP	III
UN NO. SEA	1263	IMDG CLASS	3
IMDG PAGE NO.	3	IMDG PACK GR.	III
EMS	3-05	MFAG	
MARINE POLLUTANT		UN AIR NO.	1263
ICAO CLASS	3	AIR PACK GR.	III

15- REGULATORY INFORMATION

LABELLING



MATERIAL SAFETY DATA SHEET METPROTECT 1

CONTAINS	- Modified MDI - 4,4#-Methylenediphenyl Diisocyanate [1]; Diphenylmethane-4,4#-Diisocyanate[1]; 2,2#-Mehtylenediphenyl Diisocyanate [2]; Diphenylmethane-2,2#- Diisocyanate[2]; O-(P-Isocyanatobenzyl)Phenyl Isocyanate [3]; Diphenylmethane-2,4#-Diisocyanate [3]; Methylene
RISK PHRASES	R10 Flammable R20/21 Harmful by inhalation and in contact with skin. R42/43 May cause sensitization by inhalation and skin contact. R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
SAFETY PHRASES	S23 Do not breathe gas / fumes / vapour / spray. S36/37 Wear suitable protective clothing and gloves. S51 Use only in well-ventilated areas.
FURTHER INFORMATION	Contains isocyanates. See information supplied by the manufacturers.

16- OTHER INFORMATION

REVISION DATE	28/05/04
WRITTEN BY	Johan Van Daele
ACCORDING LEGISLATION	This safety data sheet is in compliance with EC directives and adaptations: 2001/58 and 91/155, 67/548, 99/45
SAFETY DATA SHEET STATUS	Approved.
USES AND APPLICATIONS	Paint

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge



MATERIAL SAFETY DATA SHEET METPROTECT 1

and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.