

# **Dy-Mark Line Marking Professional Yellow**

Dy-Mark

Chemwatch: **62-3411** Version No: **2.1.1.1** 

Safety Data Sheet according to WHS and ADG requirements

# Chemwatch Hazard Alert Code: 4

Issue Date: 11/03/2016 Print Date: 24/03/2016 Initial Date: Not Available S.GHS.AUS.EN

# SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

## **Product Identifier**

Product name	Dy-Mark Line Marking Professional Yellow	
Synonyms	Product Code: 41025005	
Proper shipping name	AEROSOLS	
Other means of identification	Not Available	

## Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Application is by spray atomisation from a hand held aerosol pack Use according to manufacturer's directions.
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## Details of the supplier of the safety data sheet

Registered company name	Dy-Mark
Address	89 Formation Street QLD Wacol 4076 Australia
Telephone	+61 7 3271 2222
Fax	+61 7 3271 2751
Website	Not Available
Email	info@dymark.com.au

# Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	+61 403 186 708
Other emergency telephone numbers	Not Available

## **SECTION 2 HAZARDS IDENTIFICATION**

# Classification of the substance or mixture

# HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

# CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	4		
Toxicity	2		0 = Minimum
Body Contact	2		1 = Low 2 = Moderate
Reactivity	1		3 = High
Chronic	1		4 = Extreme

Poisons Schedule	Not Applicable	
Classification <sup>[1]</sup>	Aerosols Category 1, Acute Toxicity (Dermal) Category 4, Acute Toxicity (Inhalation) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2, Specific target organ toxicity - single exposure Category 3 (narcotic effects), Chronic Aquatic Hazard Category 3	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	

#### Label elements

GHS label elements





SIGNAL WORD

DANGER

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Hazard statement(s)

H222	Extremely flammable aerosol.	
H312	Harmful in contact with skin.	
H332	H332 Harmful if inhaled.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	
H412	Harmful to aquatic life with long lasting effects.	
AUH044	AUH044 Risk of explosion if heated under confinement	
AUH066	Repeated exposure may cause skin dryness and cracking	

## Supplementary statement(s)

Not Applicable

# Precautionary statement(s) Prevention

P210	Keep away from heat/sparks/open flames/hot surfaces No smoking.	
P211 Do not spray on an open flame or other ignition source.		
P251 Pressurized container: Do not pierce or burn, even after use.		
P271	Use only outdoors or in a well-ventilated area.	

## Precautionary statement(s) Response

P362	P362 Take off contaminated clothing and wash before reuse.	
P363 Wash contaminated clothing before reuse.		
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P312 Call a POISON CENTER or doctor/physician if you feel unwell.		

# Precautionary statement(s) Storage

P405	Store locked up.	
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.	
P403+P233 Store in a well-ventilated place. Keep container tightly closed.		

# Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

## **SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

► DO NOT use solvents.

▶ Seek medical attention in the event of irritation.

# Substances

See section below for composition of Mixtures

## Mixtures

CAS No	%[weight]	Name
1330-20-7	10-30	<u>xylene</u>
67-64-1	10-30	<u>acetone</u>
Not Available	10-30	resin, proprietary
Not Available	1-10	pigments, determined not to be hazardous (Mfr)
64742-82-1.	1-10	naphtha, petroleum, hydrodesulfurised heavy
107-98-2	1-10	propylene glycol monomethyl ether - alpha isomer
68476-85-7.	10-30	LPG (liquefied petroleum gas)
115-10-6	10-30	dimethyl ether

# **SECTION 4 FIRST AID MEASURES**

# Description of first aid measures

Eye Contact	If aerosols come in contact with the eyes:  Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.  Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.  Transport to hospital or doctor without delay.  Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If solids or aerosol mists are deposited upon the skin:  ► Flush skin and hair with running water (and soap if available).  ► Remove any adhering solids with industrial skin cleansing cream.

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 Remove to fresh air. Inhalation

▶ Lay patient down. Keep warm and rested.

If aerosols, fumes or combustion products are inhaled:

- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures,
- Fig. 11 If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- ► Transport to hospital, or doctor.

# Ingestion

Avoid giving milk or oils

▶ Avoid giving alcohol Not considered a normal route of entry.

▶ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically for lower alkyl ethers: BASIC TREATMENT

- ▶ Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- A low-stimulus environment must be maintained.
- Monitor and treat, where necessary, for shock.
- Anticipate and treat, where necessary, for seizures.
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not droot

ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension without signs of hypovolaemia may require vasopressors.
- Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Ethers may produce anion gap acidosis. Hyperventilation and bicarbonate therapy might be indicated.
- Haemodialysis might be considered in patients with impaired renal function.
- Consult a toxicologist as necessary.

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for simple ketones:

BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min
- Monitor and treat, where necessary, for pulmonary oedema.
- Monitor and treat, where necessary, for shock,
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5mL/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool

Give activated charcoal.

# ADVANCED TREATMENT

Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.

- Consider intubation at first sign of upper airway obstruction resulting from oedema.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Treat seizures with diazepam.
- ▶ Proparacaine hydrochloride should be used to assist eye irrigation.

EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.

Consult a toxicologist as necessary.

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EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For acute or short term repeated exposures to xylene:

- Figure 3. Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal.
- Pulmonary absorption is rapid with about 60-65% retained at rest.
- Primary threat to life from ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 < 50 mm Hg or pCO2 > 50 mm Hg) should be intubated.

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Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported: intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.

A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.

• Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.

BIOLOGICAL EXPOSURE INDEX - BEI

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant Methylhippu-ric acids in urine

Index 1.5 gm/gm creatinine 2 mg/min

Sampling Time End of shift Last 4 hrs of shift Comments

#### **SECTION 5 FIREFIGHTING MEASURES**

#### Extinguishing media

SMALL FIRE:

Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog

#### Special hazards arising from the substrate or mixture

Fire Incompatibility

▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

#### Advice for firefighters

# Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- ▶ Wear breathing apparatus plus protective gloves.
- ▶ Prevent, by any means available, spillage from entering drains or water course.

# Fire/Explosion Hazard

- ▶ Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
  - ▶ Severe explosion hazard, in the form of vapour, when exposed to flame or spark.

Combustion products include; carbon dioxide (CO2) other pyrolysis products typical of burning organic material Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

#### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

# Personal precautions, protective equipment and emergency procedures

#### Minor Spills

- ▶ Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Wear protective clothing, impervious gloves and safety glasses.
- ▶ Shut off all possible sources of ignition and increase ventilation.

## **Major Spills**

- DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve. Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves. Remove leaking cylinders to a safe place if possible
- ▶ Release pressure under safe, controlled conditions by opening the valve.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## **SECTION 7 HANDLING AND STORAGE**

# Precautions for safe handling

# Safe handling

- ▶ DO NOT allow clothing wet with material to stay in contact with skin
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area
- ▶ Prevent concentration in hollows and sumps.

# Other information

- ▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can ▶ Store in original containers in approved flammable liquid storage area
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped
- No smoking, naked lights, heat or ignition sources. ▶ Keep containers securely sealed

#### Conditions for safe storage, including any incompatibilities

Suitable container

- Aerosol dispenser.
- Check that containers are clearly labelled.

Storage incompatibility

Avoid reaction with oxidising agents

















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X — Must not be stored together

• May be stored together with specific preventions

May be stored together

# SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control parameters**

# OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	xylene	Xylene (o-, m-, p- isomers)	350 mg/m3 / 80 ppm	655 mg/m3 / 150 ppm	Not Available	Not Available
Australia Exposure Standards	acetone	Acetone	1185 mg/m3 / 500 ppm	2375 mg/m3 / 1000 ppm	Not Available	Not Available
Australia Exposure Standards	naphtha, petroleum, hydrodesulfurised heavy	White spirits	790 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	propylene glycol monomethyl ether - alpha isomer	Propylene glycol monomethyl ether	369 mg/m3 / 100 ppm	553 mg/m3 / 150 ppm	Not Available	Not Available
Australia Exposure Standards	LPG (liquefied petroleum gas)	LPG (liquified petroleum gas)	1800 mg/m3 / 1000 ppm	Not Available	Not Available	Not Available
Australia Exposure Standards	dimethyl ether	Dimethyl ether	760 mg/m3 / 400 ppm	950 mg/m3 / 500 ppm	Not Available	Not Available

## **EMERGENCY LIMITS**

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
xylene	Xylenes	Not Available	Not Available	Not Available
acetone	Acetone	Not Available	Not Available	Not Available
naphtha, petroleum, hydrodesulfurised heavy	Naphtha, hydrotreated heavy; (Isopar L-rev 2)	171 ppm	171 ppm	570 ppm
naphtha, petroleum, hydrodesulfurised heavy	Solvent naphtha, petroleum, medium aliphatic; (Mineral spirits, naphtha)	0.32 mg/m3	3.5 mg/m3	21 mg/m3
naphtha, petroleum, hydrodesulfurised heavy	Rubber solvent; (Naphtha (petroleum) light aliphatic)	264 ppm	1700 ppm	10000 ppm
naphtha, petroleum, hydrodesulfurised heavy	Petroleum distillates; (Petroleum crude oil)	87.5 ppm	450 ppm	10000 ppm
naphtha, petroleum, hydrodesulfurised heavy	Naphtha (coal tar); (Naphtha [petroleum] light aliphatic; Aliphatic naphtha)	300 ppm	1700 ppm	10000 ppm
naphtha, petroleum, hydrodesulfurised heavy	Petroleum spirits; (VM & P Naphtha, Ligroine, Paint solvent)	75 ppm	400 ppm	400 ppm
naphtha, petroleum, hydrodesulfurised heavy	Stoddard solvent; (Mineral spirits, 85% nonane and 15% trimethyl benzene)	100 ppm	350 ppm	29500 ppm
propylene glycol monomethyl ether - alpha isomer	Propylene glycol monomethyl ether; (Ucar Triol HG-170)	150 ppm	150 ppm	470 ppm
LPG (liquefied petroleum gas)	Liquified petroleum gas; (L.P.G.)	3,000 ppm	3200 ppm	19000 ppm
dimethyl ether	Methyl ether; (Dimethyl ether)	1,000 ppm	1000 ppm	7200 ppm

Ingredient	Original IDLH	Revised IDLH	
xylene	1,000 ppm	900 ppm	
acetone	20,000 ppm	2,500 [LEL] ppm	
resin, proprietary	Not Available	Not Available	
pigments, determined not to be hazardous (Mfr)	Not Available	Not Available	
naphtha, petroleum, hydrodesulfurised heavy	29,500 mg/m3 / 10,000 ppm / 10,000 [LEL] ppm	20,000 mg/m3 / 1,100 [LEL] ppm / 1,000 [LEL] ppm	
propylene glycol monomethyl ether - alpha isomer	Not Available	Not Available	
LPG (liquefied petroleum gas)	19,000 [LEL] ppm	2,000 [LEL] ppm	
dimethyl ether	Not Available	Not Available	

# **Exposure controls**

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

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## Personal protection











# Eye and face protection

#### Safety glasses with side shields

- Chemical goggles
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
- Close fitting gas tight goggles

#### DO NOT wear contact len

▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available.

#### Skin protection

# See Hand protection below

# Hands/feet protection

- No special equipment needed when handling small quantities.
- OTHERWISE:

- For potentially moderate exposures:
- Wear general protective gloves, eg. light weight rubber gloves.
- For potentially heavy exposures:
- ▶ Wear chemical protective gloves, eg. PVC. and safety footwear.

# **Body protection**

#### See Other protection below

No special equipment needed when handling small quantities.

#### OTHERWISE:

- Overalls.
- Skin cleansing cream.

#### Other protection

- Evewash unit.
- ▶ The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton.
- Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.

BRETHERICK: Handbook of Reactive Chemical Hazards.

## Thermal hazards

Not Available

## Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

# "Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the computergenerated selection:

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Material	CPI
BUTYL	С
BUTYL/NEOPRENE	С
CPE	С
HYPALON	С
NAT+NEOPR+NITRILE	С
NATURAL RUBBER	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С
SARANEX-23	С
SARANEX-23 2-PLY	С
TEFLON	С
VITON	С
VITON/NEOPRENE	С
##dimethyl	ether
##propylene glycol monomethyl ether - alpha	isomer

<sup>\*</sup> CPI - Chemwatch Performance Index

A: Best Selection

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

#### Respiratory protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	AX-AUS / Class 1	-	AX-PAPR-AUS / Class 1
up to 25 x ES	Air-line*	AX-2	AX-PAPR-2
up to 50 x ES	-	AX-3	-
50+ x ES	-	Air-line**	-

<sup>\* -</sup> Continuous-flow; \*\* - Continuous-flow or positive pressure demand

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

B: Satisfactory; may degrade after 4 hours continuous immersion

<sup>^ -</sup> Full-face

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# **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

## Information on basic physical and chemical properties

Appearance	Yellow highly flammable liquid with a strong solvent odour; not miscible with water. Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon and ether propellants.		
Physical state	Liquid	Relative density (Water = 1)	Not Available
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	-81 (propellant)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

#### **SECTION 10 STABILITY AND REACTIVITY**

Reactivity	See section 7
Chemical stability	Elevated temperatures.     Presence of open flame.     Product is considered stable.     Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

## **SECTION 11 TOXICOLOGICAL INFORMATION**

# Information on toxicological effects

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be harmful.

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of toxic gases may cause:

- ► Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures;
- respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest;
- ▶ heart: collapse, irregular heartbeats and cardiac arrest;
- gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain.

Inhaled

Inhalation hazard is increased at higher temperatures.
Following inhalation, ethers cause lethargy and stupor. Inhaling lower alkyl ethers results in headache, dizziness, weakness, blurred vision, seizures and possible coma.

Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure.

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

Headache, fatigue, tiredness, irritability and digestive disturbances (nausea, loss of appetite and bloating) are the most common symptoms of xylene overexposure. Injury to the heart, liver, kidneys and nervous system has also been noted amongst workers.

Xylene is a central nervous system depressant

Inhalational exposure to diethyl ether may cause immediate unconsciousness, inco-ordination, blurring of vision, headache, dizziness and death depending on dose and extent of exposure. It is a weak heart sensitiser in dogs.

<sup>\*</sup> Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

propylene glycol monomethyl ether - alpha

isomer

Inhalation (rat) LC50: 10000 ppm/5 h.d<sup>[2]</sup>

Oral (rat) LD50: 5207.2 mg/kg<sup>[1]</sup>

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Accidental ingestion of the material may be damaging to the health of the individual Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Ingestion Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis: serious consequences may result. (ICSC13733) Ingestion of alkyl ethers may produce stupor, blurred vision, headache, dizziness and irritation of the nose and throat. Respiratory distress and asphyxia may result Skin contact with the material may be harmful; systemic effects may result following absorption. This material can cause inflammation of the skin on contact in some persons The material may accentuate any pre-existing dermatitis condition Skin Contact Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Spray mist may produce discomfort Alkyl ethers may defat and dehydrate the skin producing dermatoses. Absorption may produce headache, dizziness, and central nervous system depression. Open cuts, abraded or irritated skin should not be exposed to this material This material can cause eye irritation and damage in some persons. Not considered to be a risk because of the extreme volatility of the gas. Eye contact with Eye alkyl ethers (vapour or liquid) may produce irritation, redness and tears. Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby. Principal route of occupational exposure to the gas is by inhalation. Chronic Chronic exposure to alkyl ethers may result in loss of appetite, excessive thirst, fatigue, and weight loss. Women exposed to xylene in the first 3 months of pregnancy showed a slightly increased risk of miscarriage and birth defects. Evaluation of workers chronically exposed to xylene has demonstrated lack of genetic toxicity. Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis). Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] TOXICITY IRRITATION Dy-Mark Line Marking Professional Yellow Not Available Not Available TOXICITY IRRITATION Dermal (rabbit) LD50: >1700 mg/kg<sup>[2]</sup> Eve (human): 200 ppm irritant Inhalation (rat) LC50: 5000 ppm/4h<sup>[2]</sup> Eye (rabbit): 5 mg/24h SEVERE Oral (rat) LD50: 4300 mg/kgt<sup>[2]</sup> Eye (rabbit): 87 mg mild Skin (rabbit):500 mg/24h moderate TOXICITY IRRITATION Dermal (rabbit) LD50: 20000 mg/kg<sup>[2]</sup> Eye (human): 500 ppm - irritant Inhalation (rat) LC50: 50.1 mg/L/8 hr<sup>[2]</sup> Eye (rabbit): 20mg/24hr -moderate acetone Oral (rat) LD50: 5800 mg/kgE<sup>[2]</sup> Eye (rabbit): 3.95 mg - SEVERE Skin (rabbit): 500 mg/24hr - mild Skin (rabbit):395mg (open) - mild TOXICITY IRRITATION Dermal (rabbit) LD50: >1900 mg/kg<sup>[1]</sup> Not Available Dermal (rabbit) LD50: >1900 mg/kq<sup>[1]</sup> Dermal (rabbit) LD50: >1900 mg/kg<sup>[1]</sup> Dermal (rabbit) LD50: >1900 mg/kg<sup>[1]</sup> Dermal (rabbit) LD50: >3000 mg/kg<sup>[2]</sup> dermal (rat) LD50: 28000 mg/kg\*n<sup>[2]</sup> Inhalation (rat) LC50: >1400 ppm/8H<sup>[2]</sup> naphtha, petroleum, Inhalation (rat) LC50: 3400 ppm/4H<sup>[2]</sup> hydrodesulfurised heavy Inhalation (rat) LC50: 61 mg/L/4H<sup>[2]</sup> Oral (rat) LD50: >19650 mg/kgd<sup>[2]</sup> Oral (rat) LD50: >4300 mg/kgd<sup>[2]</sup> Oral (rat) LD50: >4500 mg/kg<sup>[1]</sup> Oral (rat) LD50: >5000 mg/kg<sup>[2]</sup> TOXICITY IRRITATION dermal (rat) LD50: >2000 mg/kg<sup>[1]</sup> Eye (rabbit) 230 mg mild

Eve (rabbit) 500 mg/24 h. - mild

Eye (rabbit): 100 mg SEVERE

# **Dy-Mark Line Marking Professional Yellow**

	1		
		Skin (rabbit) 500	0 mg open - mild
	TOXICITY	IRRITATION	
	Inhalation (mouse) LC50: >15.6-<17.9 mm/l2 h mm/l2="">[1	] Not Available	
	Inhalation (mouse) LC50: >15.6-<17.9 mm/l2 h mm/l2="">[1	1	
	Inhalation (mouse) LC50: 410000 ppm2 h <sup>[1]</sup>		
	Inhalation (mouse) LC50: 410000 ppm2 h <sup>[1]</sup>	1	
	Inhalation (rat) LC50: >800000 ppm15 min <sup>[1]</sup>		
LPG (liquefied petroleum	Inhalation (rat) LC50: >800000 ppm15 min <sup>[1]</sup>		
gas)	Inhalation (rat) LC50: 1354.944 mg/L15 min <sup>[1]</sup>		
	Inhalation (rat) LC50: 1355 mg/l15 min <sup>[1]</sup>		
	Inhalation (rat) LC50: 1442.738 mg/L15 min <sup>[1]</sup>		
	Inhalation (rat) LC50: 1442.738 mg/L15 min <sup>[1]</sup>		
	Inhalation (rat) LC50: 1443 mg/l15 min <sup>[1]</sup>	 	
	Inhalation (rat) LC50: 1443 mg/l15 min <sup>[1]</sup>	1 1 1	
	Inhalation (rat) LC50: 570000 ppm15 min <sup>[1]</sup>	 	
dimethyl ether	TOXICITY	IRRITATION	
•	Inhalation (rat) LC50: 309 mg/L/4H <sup>[2]</sup>	Nil reported	
Legend:	Value obtained from Europe ECHA Registered Substances     extracted from RTECS - Register of Toxic Effect of chemical S		rom manufacturer's SDS. Unless otherwise specified data
Dy-Mark Line Marking Professional Yellow	Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA); tripropylene glycol methyl ether (TPM).  Testing of a wide variety of propylene glycol ethers Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on reproductive organs, the developing embryo and fetus, blood (haemolytic effects), or thymus, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces an alkoxyacetic acid.  No significant acute toxicological data identified in literature search. inhalation of the gas		
XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.  The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.  The substance is classified by IARC as Group 3:  NOT classified by IARC as carcinogenicity to humans.  Evidence of carcinogenicity may be inadequate or limited in animal testing.  Reproductive effector in rats		
ACETONE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.  for acetone:  The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitiser but is a defatting agent to the skin. Acetone is an eye irritant. The subchronic toxicity of acetone has been examined in mice and rats that were administered acetone in the drinking water and again in rats treated by oral gavage.		
NAPHTHA, PETROLEUM, HYDRODESULFURISED HEAVY	No significant acute toxicological data identified in literature s	earch.	
PROPYLENE GLYCOL MONOMETHYL ETHER - ALPHA ISOMER	for propylene glycol ethers (PGEs): Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA); tripropylene glycol methyl ether (TPM).  Testing of a wide variety of propylene glycol ethers Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on reproductive organs, the developing embryo and fetus, blood (haemolytic effects), or thymus, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces an alkoxyacetic acid.  NOTE: For PGE - mixed isomers: Exposure of pregnant rats and rabbits to the substance did not give rise to teratogenic effects at concentrations up to 3000 ppm. Foetotoxic effects were seen in rats but not in rabbits at this concentration; maternal toxicity was noted in both species.		
LPG (LIQUEFIED PETROLEUM GAS)	No significant acute toxicological data identified in literature search. inhalation of the gas		
Acute Toxicity	<b>*</b>	Carcinogenicity	0
Skin Irritation/Corrosion	<b>~</b>	Reproductivity	0
Serious Eye Damage/Irritation	<b>~</b>	STOT - Single Exposure	<b>~</b>
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	⊗
Mutagenicity	0	Aspiration Hazard	0

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O - Data Not Available to make classification

# **SECTION 12 ECOLOGICAL INFORMATION**

# Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
ylene	EC50	24	Crustacea	0.711mg/L	4
ylene	LC50	96	Fish	0.0013404mg/L	4
ylene	EC50	48	Crustacea	>3.4mg/L	2
cylene	EC50	72	Algae or other aquatic plants	4.6mg/L	2
cylene	NOEC	73	Algae or other aquatic plants	0.44mg/L	2
acetone	EC50	384	Crustacea	97.013mg/L	3
acetone	EC50	48	Crustacea	>100mg/L	4
acetone	EC50	96	Algae or other aquatic plants	20.565mg/L	4
acetone	LC50	96	Fish	>100mg/L	4
acetone	NOEC	96	Algae or other aquatic plants	4.950mg/L	4
naphtha, petroleum, nydrodesulfurised heavy	EC50	72	Algae or other aquatic plants	=13mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	EC50	72	Algae or other aquatic plants	=30000mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	NOEC	72	Algae or other aquatic plants	=0.1mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	EC50	96	Algae or other aquatic plants	64mg/L	2
naphtha, petroleum, nydrodesulfurised heavy	EC50	96	Algae or other aquatic plants	64mg/L	2
naphtha, petroleum, nydrodesulfurised heavy	EC50	48	Crustacea	>100mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	EC50	96	Algae or other aquatic plants	=450mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	EC50	72	Algae or other aquatic plants	=6.5mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	NOEC	72	Algae or other aquatic plants	<0.1mg/L	1
naphtha, petroleum, hydrodesulfurised heavy	BCF	96	Fish	0.2mg/L	4
naphtha, petroleum, hydrodesulfurised heavy	EC20	168	Crustacea	0.11mg/L	4
naphtha, petroleum, hydrodesulfurised heavy	EC50	48	Crustacea	0.058mg/L	4
naphtha, petroleum, hydrodesulfurised heavy	LC50	96	Fish	0.00746mg/L	4
naphtha, petroleum, nydrodesulfurised heavy	NOEC	168	Crustacea	<=0.05mg/L	4
naphtha, petroleum, nydrodesulfurised heavy	EC50	48	Crustacea	3.7mg/L	4
naphtha, petroleum, nydrodesulfurised heavy	LC50	96	Fish	8.8mg/L	4
naphtha, petroleum, hydrodesulfurised heavy	EC50	72	Algae or other aquatic plants	=6.5mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	NOEC	72	Algae or other aquatic plants	<0.1mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	EC50	96	Algae or other aquatic plants	64mg/L	2
naphtha, petroleum, nydrodesulfurised heavy	EC50	72	Algae or other aquatic plants	=6.5mg/L	1
naphtha, petroleum, nydrodesulfurised heavy	NOEC	72	Algae or other aquatic plants	<0.1mg/L	1
oropylene glycol nonomethyl ether - alpha somer	EC50	48	Crustacea	>500mg/L	1
propylene glycol monomethyl ether - alpha somer	EC50	384	Crustacea	227.843mg/L	3
oropylene glycol monomethyl ether - alpha somer	LC50	96	Fish	>=1000mg/L	2

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propylene glycol monomethyl ether - alpha NOEC 48 Crustacea >=1000ma/L 2 isomer propylene glycol monomethyl ether - alpha FC50 72 Algae or other aquatic plants >500ma/L 2 isomer LPG (liquefied petroleum LC50 2 96 Fish 24.11mg/L gas) LPG (liquefied petroleum 2 EC50 96 Algae or other aquatic plants 7.71mg/L gas) LPG (liquefied petroleum 2 EC50 96 Algae or other aquatic plants 8.57mg/L gas) LPG (liquefied petroleum LC50 96 24.11mg/L 2 gas) LPG (liquefied petroleum 2 EC50 96 Algae or other aquatic plants 7.71mg/L gas) LPG (liquefied petroleum EC50 96 Algae or other aquatic plants 8.57mg/L 2 gas) dimethyl ether NOEC 48 Crustacea >4000ma/L 1 EC50 384 Crustacea 3 dimethyl ether 46.027mg/L LC50 3 dimethyl ether 96 Fish 200.592mg/L dimethyl ether EC50 48 Crustacea >4400.0mg/L 2 dimethyl ether 96 154.917mg/L EC50 Algae or other aquatic plants 2 Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 -Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -Legend: Bioconcentration Data 7, METI (Japan) - Bioconcentration Data 8, Vendor Data

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

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the

oxygen transfer between the air and the water

Oils of any kind can cause:

- reducing of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility
- $\blacktriangleright \ \ \text{lethal effects on fish by coating gill surfaces, preventing respiration}$
- asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and
- ▶ adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation. For Propylene Glycol Ethers: log Kow's range from 0.309 for TPM to 1.523 for DPnB. Calculated BCFs range from 1.47 for DPnB to 3.16 for DPMA and TPM, indicating low bioaccumulation. Henry's Law Constants are low for all category members, ranging from 5.7 x 10-9 atm-m3/mole for TPM to 2.7 x10-9 atm-m3/mole for PnB.

Environmental Fate: Most are liquids at room temperature and all are water-soluble.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are 'semi-volatile substances' which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization. Terrestrial Fate: BTEX compounds have the potential to move through soil and contaminate ground water, and their vapors are highly flammable and explosive.

Ecotoxicity - Within an aromatic series, acute toxicity increases with increasing alkyl substitution on the aromatic nucleus.

For Petroleum Hydrocarbon Gases:

Environmental Fate: Petroleum hydrocarbon gases are primarily produced in petroleum refineries, or in gas plants that separate natural gas and natural gas liquids. This category contains 99 petroleum hydrocarbon gas substances, the majority of which never reach the consumer. Petroleum hydrocarbon gases do not contain inorganic compounds, (e.g. hydrogen sulfide, ammonia, and carbon monoxide), other than asphyxiant gases; the low molecular weight hydrocarbon molecules are primarily responsible for the hazard associated with these gases.

Atmospheric Fate: All components of these gases will evaporate to the air where interaction with hydroxyl radicals is an important fate process.

For Xylenes:

log Koc: 2.05-3.08; Koc: 25.4-204; Half-life (hr) air: 0.24-42; Half-life (hr) H2O surface water: 24-672; Half-life (hr) H2O ground: 336-8640; Half-life (hr) soil: 52-672; Henry's Pa m3/mol: 637-879; Henry's atm m3/mol - 7.68E-03; BOD 5 if unstated - 1.4,1%; COD - 2.56,13% ThOD - 3.125: BCF: 23; log BCF: 1.17-2.41.

Environmental Fate: Most xylenes released to the environment will occur in the atmosphere and volatilisation is the dominant environmental fate process. Soil - Xylenes are expected to have moderate mobility in soil evaporating rapidly from soil surfaces. The extent of the degradation is expected to depend on its concentration, residence time in the soil, the nature of the soil, and whether resident microbial populations have been acclimated.

For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions.

Most ethers are very resistant to hydrolysis, and the rate of cleavage of the carbon-oxygen bond by abiotic processes is expected to be insignificant.

Direct photolysis will not be an important removal process since aliphatic ethers do not absorb light at wavelengths >290 nm For Propane: Koc 460. log

For Propane Kow 2.36.

Henry's Law constant of 7.07x10-1 atm-cu m/mole, derived from its vapour pressure, 7150 mm Hg, and water solubility, 62.4 mg/L. Estimated BCF: 13.1.

**DO NOT** discharge into sewer or waterways.

For Acetone

log Kow : -0.24;

Half-life (hr) air : 312-1896; Half-life (hr) H2O surface water : 20;

Henry's atm m3 /mol : 3.67E-05 BOD 5: 0.31-1.76.46-55%

COD: 1.12-2.07

ThOD: 2.2BCF: 0.69

Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.

Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days.

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# Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
acetone	LOW (Half-life = 14 days)	MEDIUM (Half-life = 116.25 days)
propylene glycol monomethyl ether - alpha isomer	LOW (Half-life = 56 days)	LOW (Half-life = 1.7 days)
dimethyl ether	LOW	LOW

### **Bioaccumulative potential**

Ingredient	Bioaccumulation
xylene	MEDIUM (BCF = 740)
acetone	LOW (BCF = 0.69)
propylene glycol monomethyl ether - alpha isomer	LOW (BCF = 2)
dimethyl ether	LOW (LogKOW = 0.1)

#### Mobility in soil

Ingredient	Mobility
acetone	HIGH (KOC = 1.981)
propylene glycol monomethyl ether - alpha isomer	HIGH (KOC = 1)
dimethyl ether	HIGH (KOC = 1.292)

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

#### Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- ▶ Reduction
- ▶ Reuse
- ▶ Recycling
- ► Disposal (if all else fails)

Product / Packaging

disposal

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ▶ It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- Consult State Land Waste Management Authority for disposal.
- ▶ Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- ► DO NOT incinerate or puncture aerosol cans

# **SECTION 14 TRANSPORT INFORMATION**

# **Labels Required**



Marine Pollutant	NO
HAZCHEM	Not Applicabl

# Land transport (ADG)

Land transport (ADD)	
UN number	1950
Packing group	Not Applicable
UN proper shipping name	AEROSOLS
Environmental hazard	Not Applicable
Transport hazard class(es)	Class 2.1 Subrisk Not Applicable
Special precautions for user	Special provisions 63 190 277 327 344  Limited quantity 1000ml

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**UN** number 1950 Packing group Not Applicable **UN** proper shipping name Aerosols, flammable; Aerosols, flammable (engine starting fluid) **Environmental hazard** Not Applicable ICAO/IATA Class 2.1 Transport hazard class(es) ICAO / IATA Subrisk Not Applicable **ERG Code** 10L Special provisions A145A167A802; A1A145A167A802 Cargo Only Packing Instructions 203 Cargo Only Maximum Qty / Pack 150 kg Passenger and Cargo Packing Instructions 203: Forbidden Special precautions for user Passenger and Cargo Maximum Qty / Pack 75 kg; Forbidden Passenger and Cargo Limited Quantity Packing Instructions Y203: Forbidden Passenger and Cargo Limited Maximum Qty / Pack 30 kg G; Forbidden

### Sea transport (IMDG-Code / GGVSee)

oca transport (timbo ocac, dottoco)	
UN number	1950
Packing group	Not Applicable
UN proper shipping name	AEROSOLS
Environmental hazard	Not Applicable
Transport hazard class(es)	IMDG Class 2.1  IMDG Subrisk Not Applicable
Special precautions for user	EMS Number F-D, S-U Special provisions 63 190 277 327 344 959 Limited Quantities 1000ml

# Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

## **SECTION 15 REGULATORY INFORMATION**

### Safety, health and environmental regulations / legislation specific for the substance or mixture

## XYLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

Monographs

## ACETONE(67-64-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS)

Australia Hazardous Substances Information System - Consolidated Lists

#### NAPHTHA, PETROLEUM, HYDRODESULFURISED HEAVY(64742-82-1.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs Australia Hazardous Substances Information System - Consolidated Lists International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Australia Inventory of Chemical Substances (AICS) Passenger and Cargo Aircraft

#### PROPYLENE GLYCOL MONOMETHYL ETHER - ALPHA ISOMER(107-98-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS) Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

#### LPG (LIQUEFIED PETROLEUM GAS)(68476-85-7.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS) Australia Hazardous Substances Information System - Consolidated Lists International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List

Passenger and Cargo Aircraft

# DIMETHYL ETHER(115-10-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards Australia Inventory of Chemical Substances (AICS) Australia Hazardous Substances Information System - Consolidated Lists International Air Transport Association (IATA) Dangerous Goods Regulations - Prohibited List Passenger and Cargo Aircraft

**National Inventory** Status Australia - AICS Υ Canada - DSL

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Canada - NDSL	N (acetone; propylene glycol monomethyl ether - alpha isomer; xylene; dimethyl ether; LPG (liquefied petroleum gas); naphtha, petroleum, hydrodesulfurised heavy)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	Y
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

# **SECTION 16 OTHER INFORMATION**

#### Other information

#### Ingredients with multiple cas numbers

Name	CAS No
naphtha, petroleum, hydrodesulfurised heavy	101795-02-2., 1030262-12-4., 121448-83-7., 50813-73-5., 54847-97-1., 61789-95-5., 64741-92-0., 64742-48-9., 64742-82-1., 64742-88-7., 64742-89-8., 8002-05-9., 8030-30-6., 8030-31-7., 8031-06-9., 8031-38-7., 8031-39-8., 8032-32-4., 8052-41-3.
dimethyl ether	115-10-6, 157621-61-9

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average

 ${\sf PC-STEL} : {\sf Permissible \ Concentration-Short \ Term \ Exposure \ Limit}$ 

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value

BCF: BioConcentration Factors

BEI: Biological Exposure Index

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