

SAFETY DATA SHEET

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

Product name: **METHANOL**
Supplier: **LABSCAN LIMITED,
T24-26 STILLORGAN INDUSTRIAL PARK, STILLORGAN,
CO. DUBLIN, IRELAND.**
Emergency telephone number: **+353 1 295 2684** Fax No: **+353 1 295 2685**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
METHYL ALCOHOL	67-56-1	603-001-00-X	F; R11 T; R23/24/25 R39/23/24/25	100

3. HAZARDS IDENTIFICATION

Most important hazards: Highly flammable.
Toxic by inhalation and if swallowed.

Specific hazards Very toxic if swallowed.
Liquid causes severe inflammation of conjunctiva and may cause severe damage of the cornea.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.
Effects due to ingestion may include: vomiting, dizziness, blindness & unconsciousness.
Effects of breathing high concentrations of vapour may include; headache, nausea, vomiting, dizziness & unconsciousness.

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. Obtain medical attention.

Skin contact: Remove contaminated clothing and wash affected skin with soap and water. Obtain medical attention. If signs of poisoning appear, treat as for inhalation.

Eye contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

Product name: **METHANOL**

Ingestion: Clean mouth with water and drink afterwards plenty of water. A. Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. Obtain medical attention. Administer ethanol (e.g 1 drinking glass of a 40% alcoholic beverage).
Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Extinguish with carbon dioxide, dry chemical, foam or waterspray. In the event of fire, cool tanks with water spray.

Extinguishing media which must not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards:

Burns with colourless flame.

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective suit.

Specific methods:

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Evacuate personnel to safe areas. Remove all sources of ignition. Wear self-contained breathing apparatus and protective suit. Keep people away from and upwind of spill/leak.

Environmental precautions:

Contain or absorb leaking liquid with sand or earth. Consult an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

Methods for cleaning up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer to covered steel drums. Dispose of promptly.

7. HANDLING AND STORAGE

Handling:

Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Product name: **METHANOL**

Review Date 16/06/2005

REF: LS3513

Storage: Keep tightly closed in a dry, cool and well-ventilated place.
Keep away from heat and sources of ignition. Store in original container.
Electrical equipment should be protected to the appropriate standard.
Purge open drums with nitrogen before resealing

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name:

METHYL ALCOHOL

National occupational exposure limits:EH40: OES 200ppm (260 mg/m³) 8h TWA.EH40: OES 250ppm (310 mg/m³) 15min TWA.

Engineering measures to reduce exposure

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.

Personal protection equipment:

- **Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
- **Hand protection:** Full contact: Butyl rubber. Splash contact: viton gloves. The material should comply with 89/686/EEC and EN374.
- **Eye protection:** Goggles giving complete protection to eyes.
- **Skin and body protection:** Rubber or plastic boots. Chemical resistant apron / complete suit protecting against chemicals.

Hygiene measures:

Ventilation hoods and fans required when working with organic solvents or in hot melt applications.
Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Formula:	CH₃OH
Form:	liquid,
Colour:	colourless,
Odour:	alcoholic
pH:	(°C) no data available (g/l H ₂ O)
Boiling point/range:	64.7 °C
Melting point/range:	-97.8 °C
Decomposition temperature:	°C
Flash point:	12 °C
Autoignition temperature:	385 °C
Flammability (solid, gas):	Classification " highly flammable "
Explosive properties:	
Explosion limits:	- lower 7.3 vol. %
	- upper 36.0 vol. %

Product name: **METHANOL**

Oxidizing properties:		no data available	
Vapour pressure:	(20 °C)	130	hPa
Relative density:	(20 °C) >=	0.789 g/ml	
	<=		
Bulk density:		789	kg/m³
Solubility:			
Water solubility	(°C)	completely miscible	g/l)
Solubility in other solvents		miscible with most organic solvents	
Partition coefficient (n-octanol/water)		-0.77	
Viscosity:	(20 °C)	0.738	mPa.s

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Conditions to avoid:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).
Materials to avoid:	alkali metals, halides, reducing agents, triethylaluminium, nitrates, metallic and non-metallic oxides.
Hazardous decomposition products:	carbon monoxide, carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50/oral/rat = 5628mg/kg LD50/oral/human = 143 mg/kg. LC50/inhalation/4h/rat = 64000ppm(V) LD50/dermal/rabbit = 20000 mg/kg.
Sensitization:	Toxic by inhalation. Irritant effect on eyes. Irritating to eyes and respiratory system. Systemic effects: acidosis, decreased blood pressure, agitation, spasms, narcosis and coma.
Long term toxicity:	Repeated or prolonged exposure; May cause irreversible eye damage.
Chronic toxicity:	Non-carcinogenic in animal experiments. Mutagenicity (mammal cell test): negative. (in vitro) . Chronic exposure may cause permanent damage of health.

12. ECOLOGICAL INFORMATION

Mobility:	Completely miscible with water. Volatile / gaseous.
------------------	-----------------------------------------------------

Product name: **METHANOL****Persistence / degradability:**

Abiotic degradation: rapid slow. Readily biodegradable, according to appropriate OECD test.
 Biochemical oxygen demand within 5 days (BOD5) = 48-82% of Theoretical oxygen demand (ThOD).
 BOD: 76% TOD/5d, DOC>70%; BOD<60%; BOD5 - COD>50%. BOD5:0. 6-1.12 g/g; COD: 1.42g/g;
 TOD: 1.5 g/g.
 logP(o/w) : -0.74

Bioaccumulation:

Bioaccumulation not applicable.
 estimated Bioconcentration factor (BCF) = 2.0

Ecotoxicity:

LC50/96h/bluegill sunfish = 15400 mg/l
 NOEL/48h/ Daphnia =>10000mg/l/
 Toxicity to algae = 8000 mg/l
 Bacterial Toxicity: >10000 mg/l/72h
 Toxicity to bacteria = 6600 mg/l/16h

13. DISPOSAL CONSIDERATIONS**Waste from residues / unused products:**

Can be incinerated, when in compliance with local regulations.
 Contact waste disposal services.

Contaminated packaging:

Empty containers can be landfilled after cleaning, when in compliance with local regulations.

14. TRANSPORT INFORMATION**ADR/RID**

Proper shipping name:	Methyl alcohol	Item:	17(B)
Class:	3	HI/UN No:	1230
Packaging group:	II		

IMO

Proper shipping name:	Methyl alcohol	IMDG Page:	3251
Class:	3.2	MFAG:	306
EmS:	3-06	UN-No:	1230
Packaging group:	II		
Marine pollutant:	Not applicable		

ICAO

Proper shipping name:	Methyl alcohol	UN/ID No:	1230
Class:	3		
Packaging group:	II		

15. REGULATORY INFORMATION

**Classification according to European directive on classification of hazardous preparations
 2001/58/EC**

- **Contains:** Methyl Alcohol

Product name: **METHANOL**

Review Date 16/06/2005

REF: LS3513

- Symbol(s):

F - Highly flammable.



T - Toxic.

R -phrase(s):

R11 - Highly flammable.

R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.

R39/23/24/25 - Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

S -phrase(s):

S 7 - Keep container tightly closed.

S16 - Keep away from sources of ignition - No smoking.

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).

16. OTHER INFORMATION

Recommended restrictions: Take notice of labels and material safety data sheets for the working chemicals. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors)

Recommended use: General purpose solvent.

Further information: Contact Labscan Limited

REVISION DATE: 20/08/2002

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 unless specified in the text.