

**MATERIAL SAFETY DATA SHEET****METHANOL (Methyl Alcohol)****MSDS-M001****1. Identification of the substance/preparation and of the company/undertaking**

**Product name** : R METHANOL. **Supplier** : Nutid Ltd  
3 Holly Close  
Sandford  
Wareham  
Dorset  
BH20 7QE

**Chemical product name** : METHANOL.  
**Synonyms** : METHANOL.

**EMERGENCY ONLY TELEPHONE NUMBER** : (TTT Consulting) 01524 414599 **Telephone No.** : 01929 551557

**Formula** : CH<sub>3</sub>OH **Fax No.** : 01929 551567  
**Molecular Mass** : 32.04

**2. Composition/information on ingredients****Substance/Preparation** : Substance

Chemical name*	CAS No.	%	EC Number	Symbol	R-Phrases
1) METHANOL.	67-56-1	100	200-659-6	F, T	R11, R23/24/25, R39/23/24/25

\* Occupational Exposure Limit(s), if available, are listed in Section 8

**Composition** CONTAINS 99.9% (MIN) BY MASS OF METHANOL.  
**CAS No.** 67-56-1  
**EINECS Number** 200-659-6

**3. Hazards identification**

**Physical/chemical Hazards** : Highly flammable.  
**Human health hazards** : Toxic by inhalation, in contact with skin and if swallowed.  
Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

**4. First-aid measures****First-Aid measures**

**Inhalation** : Remove from exposure. Keep warm and at rest. If there is difficulty in breathing, give oxygen. If breathing stops or shows signs of failing, give artificial respiration. Do not use mouth to mouth ventilation. Obtain medical attention urgently.

**Ingestion** : Wash out mouth with water. Have victim drink 240-300ml of water to dilute stomach contents. Obtain medical attention. Do not induce vomiting.

**Skin contact** : Immediately flood the skin with large quantities of water, preferably under a shower. Immediately wash skin thoroughly with soap and water. Remove contaminated clothing as washing proceeds. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention urgently.

**Eye Contact** : Immediately flood the eye with plenty of water for at least 10 minutes, holding the eye open. Wash out eye with plenty of water. Obtain medical attention urgently.

**Effects and symptoms**

**Inhalation** : Exposure to vapour may have the following effects:- irritation of nose, throat and respiratory tract. dizziness. loss of coordination. nausea. vomiting. temporary or permanent blindness. coma and death.

**Ingestion** : Swallowing may have the following effects:- dizziness. loss of coordination. loss of consciousness. temporary or permanent blindness. coma and death.

**Skin contact** : Material will cause irritation. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Liquid may be absorbed through the skin in toxicologically significant amounts if area of contact is large and exposure prolonged. dizziness. central nervous system depression. nausea. vomiting. loss of coordination.

**Eye Contact** : Liquid or vapour will cause conjunctival irritation. may cause severe damage and may result in loss of vision.

**Aggravating conditions** : Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

## METHANOL.

**Notes to physician** : Use gastric lavage if more than 20ml taken in last 4 hours. Avoid aspiration. Correct acidosis with sodium bicarbonate (more than 500m.mol may be required). Ethanol blocks metabolism of methanol to toxic metabolites. Initial dose 1ml/kg 50% solution, then 0.5ml/kg 2 hourly until methanol not detectable in blood. Dialysis indicated in severe cases (See Lancet, No. 8088, 2 Sept.1978 (ii) p510).

## 5. Fire-fighting measures

### Extinguishing Media

**Suitable** : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use water jet. Select extinguishing agent appropriate to other materials involved. Keep containers and surroundings cool with water spray.

**Unusual fire/explosion Hazards** : Hazardous Combustion Products : CARBON MONOXIDE , FORMALDEHYDE

This product may give rise to hazardous fumes in a fire. The vapours are heavier than air and will collect in workpits and cellars, creating a fire and respiratory hazard. Can be violent and explosively reactive (8), when in contact with oxidizing agents and certain metals.

**Hazardous thermal (de)composition products** : Combustion will generate: oxides of carbon. formaldehyde.

**Special fire-fighting procedures** : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

**Protection of fire-fighters** : Wear full protective clothing and self-contained breathing apparatus.

## 6. Accidental release measures

**Personal Precautions** : Ventilate the area to dispel residual vapours. Wear appropriate protective clothing. Consider need for evacuation. Eliminate all sources of ignition. Wear respiratory protection.

**Environmental precautions and cleanup methods** : Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.

: Advise Authorities if spillage has entered water course or sewer or has contaminated soil or vegetation.

## 7. Handling and storage

**Handling** : Use in well ventilated area. Avoid contact with eyes, skin and clothing. Avoid inhaling vapour. Emergency shower and eye wash facilities should be readily available.

**Storage** : Storage area should be: cool. under cover. well ventilated. Storage area should be: out of direct sunlight. Store away from sources of heat or ignition. Storage and transfer equipment should be adequately earthed and bonded to prevent the accumulation of static charges. Obtain specialist advise in the choice of electrical equipment. Keep containers tightly closed - see firefighting measures. Store under a nitrogen blanket. Suitable storage materials are:- stainless steel. mild steel. High density polyethylene, unplasticised pvc and vulcanised natural rubber linings may be used at product temperatures below 25°C. Do not store in:- lead. zinc. tin. This material is hygroscopic.

### Packaging materials

**Recommended use** : Use original container.

## 8. Exposure controls/personal protection

**Engineering measures** : Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

**Hygiene measures** : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

**Occupational Exposure Limits** : Not available.

### Personal protective equipment

**Respiratory system** : Respiratory protection if there is a risk of exposure to high vapour concentrations.

**Skin and body** : Wear: antistatic footwear rubber apron.

**Hands** : PVC or rubber gloves.

**Eyes** : Chemical goggles.

## 9. Physical and chemical properties

**Physical state** : Liquid.

**Colour** : Clear. Colourless.

**Odour** : Characteristic.

**Boiling point** : 65°C

**Melting point** : -97.5°C

**Density** : 792 at 20 °C.

**Vapour density** : 1.11

**Vapour pressure** : 129 mbar 20°C

**Solubility** : Completely soluble.

**pH** : Not available.

## METHANOL.

Flash point	: 9.5°C
Autoignition temperature	: 470°C
Lower explosion limit	: 6 to 36. (measured as V/V)
Viscosity	: 0.588 cP 20°C

## 10. Stability and reactivity

Stability	: The product is stable.
Conditions to Avoid	: Static discharge. Exposure to direct sunlight. High temperatures.
Materials to avoid	: Concentrated nitric acid. Strong oxidising agents. Metals such as sodium, potassium and barium.
Hazardous decomposition products	: Combustion will generate: oxides of carbon. formaldehyde.

## 11. Toxicological information

### Local effects

Skin irritation	: A single 4h semi-occlusive application to intact rabbit skin produced irritation (mean scores for erythema or oedema 2 or above).
Acute toxicity	: Estimated fatal dose for adults is 15ml. Blindness may be caused by swallowing as little as 10ml.
Chronic toxicity	: Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

## 12. Ecological information


Ecotoxicity	: The product is rated as slightly toxic to aquatic species.
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## 13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging	: Dispose of in accordance with all applicable local and national regulations.
Waste Classification	: Not applicable.

## 14. Transport information

### International transport regulations

UN :	UN number	1230
UN :	Proper shipping name	Methanol.
UN :	Class	3 Subsidiary Class 6.1
UN :	Packing group	II
UN :	Label	
ADR/RID :	Number	1230
ADR/RID :	Proper shipping name	Methanol(methyl alcohol).
ADR/RID :	Class	3 Subsidiary Class 6.1
ADR/RID :	Item Number	17(b)
ADR/RID :	Hazard identification number	336
TREMCARD	TEC(R)	TEC(R)-36
IMDG :	Proper shipping name	Methanol(methyl alcohol)
IMDG :	Packing group	II
IMDG :	Class	3 Subsidiary Class 6.1
IMDG :	Marine pollutant	No
IATA :	Proper shipping name	Methanol(methyl alcohol).
IATA :	Packing group	II
IATA :	Class	3 Subsidiary Class 6.1

## 15. Regulatory information

### EU Regulations

Hazard symbol(s)

:



Classification

: Highly flammable, Toxic

Risk Phrases

: 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.

Safety Phrases

: S1/2 Keep locked up and out of reach of children.  
S7 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).

Contains

: - METHANOL.

Product Use

: Classification and labelling have been performed according to EU directives 67/548/EEC, 88/379/EEC, including amendments and the intended use.  
- Consumer applications.

## 16. Other information

### HISTORY

*(Please note that dates are in European format [day/month/year])*

Date of printing

: 05/03/2003

Date of issue

: 31/01/2003

Date of previous issue

: N/A

Version

: 1

Prepared by

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### Notice to Reader

*To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*

### **CHANGES SINCE PREVIOUS VERSIONS:**

Section 14, UN Label: Added subsidiary risk diamond pictogram.

Version

1

Page: 4/4