

## SAFETY DATA SHEET

### Methanol Premium Grade

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

##### 1.1. Product identifier

Synonyms, Trade Names	Methyl Alcohol Monohydroxymethane Methyl hydroxide Wood alcohol Carbinol
REACH Registration Number	01-2119433307-44
CAS-No.	67-56-1
EU Index No.	603-001-00-X
EC No.	200-659-6

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

Identified uses	The following uses are addressed through the Chemical Safety Report (CSR) and Generic Exposure Scenario (GES) library: Manufacture of substance Distribution of substance Formulation & (re)packing of substances and mixtures Use in cleaning agents Laboratories De-icing and anti-icing applications Use as a fuel
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##### 1.3. Details of the supplier of the safety data sheet

Supplier:	Anglo American Oil Company Sandford Wareham Dorset BH207QE +44(0)1929 551557 Mian@aaol.co.uk
Contact Person	

##### 1.4. Emergency telephone number

Please contact Harwich Refinery on +44(0) 1255 502372

#### SECTION 2: HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Acute Tox. 3 - H301; Acute Tox. 3 - H311; Acute Tox. 2 - H330; STOT Single 1 - H370
Environment	Not classified.

Classification (67/548/EEC) T;R23/24/25, R39/23/24/25. F;R11.

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16

##### 2.2. Label elements

EC No. 200-659-6  
Label In Accordance With (EC) No. 1272/2008

# Methanol Premium Grade



<b>Signal Word</b>	Danger	
<b>Hazard Statements</b>	H225	Highly flammable liquid and vapour.
	H301	Toxic if swallowed.
	H311	Toxic in contact with skin.
	H330	Fatal if inhaled.
	H370	Causes damage to organs Central nervous system , Eyes .
<b>Precautionary Statements</b>	P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
	P243	Take precautionary measures against static discharge.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
	P501a	Dispose of contents/container to a registered waste disposal company
<b>Supplementary Precautionary Statements</b>	P233	Keep container tightly closed.
	P240	Ground/bond container and receiving equipment.
	P242	Use only non-sparking tools.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P270	Do not eat, drink or smoke when using this product.
	P271	Use only outdoors or in a well-ventilated area.
	P284	Wear respiratory protection.
	P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P330	Rinse mouth.
	P361	Remove/Take off immediately all contaminated clothing.
	P363	Wash contaminated clothing before reuse.
	P403+233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.

## 2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

<b>REACH Registration Number</b>	01-2119433307-44
<b>CAS-No.</b>	67-56-1
<b>EU Index No.</b>	603-001-00-X
<b>EC No.</b>	200-659-6
<b>Gross Formula</b>	CH3OH

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General Information

Place unconscious person on the side in the recovery position and ensure breathing can take place.

Remove affected person from source of contamination.

General first aid, rest, warmth and fresh air.

CAUTION! First aid personnel must be aware of own risk during rescue!

NOTE! Keep affected person away from heat, sparks and flames!

#### Inhalation.

Move the exposed person to fresh air at once.

Provide rest, warmth and fresh air.

If breathing stops, provide artificial respiration.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

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Get medical attention.

## Ingestion

Get medical attention immediately!

Immediately rinse mouth and drink plenty of water. Call an ambulance. Bring along these instructions.

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

## Skin Contact

Remove contaminated clothing immediately and wash skin with soap and water.

Get medical attention if any discomfort continues.

## Eye Contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart.

Continue to rinse for at least 15 minutes and get medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

### Inhalation.

Irritation of nose, throat and airway. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

### Ingestion

May cause stomach pain or vomiting. Drowsiness, dizziness, disorientation, vertigo. Central nervous system depression. Ingestion may result in unconsciousness, blindness and death.

### Skin Contact

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. This substance is rapidly absorbed through the skin and may cause symptoms similar to those of ingestion.

### Eye Contact

Irritating and may cause redness and pain. May cause blurred vision and serious eye damage.

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

Causes acidosis. Causes central nervous system depression. Symptoms and effects may be delayed for 18 to 24 hours and in some cases up to 72 hours. Treatment of poisoning may require the use of ethanol. Treatment of acidosis may include correction with alkali solution, haemodialysis and supportive measures such as correction of electrolyte imbalances, where necessary. Potassium supplements may also be required.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### Extinguishing Media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

#### Unsuitable Extinguishing Media

Non-alcohol resistant foam Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

#### Hazardous Combustion Products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

#### Unusual Fire & Explosion Hazards

HIGHLY FLAMMABLE!

May explode when heated or when exposed to flames or sparks.

Solvent vapours may form explosive mixtures with air.

May travel considerable distance to source of ignition and flash back.

Vapours are heavier than air and may spread near ground to sources of ignition.

May ignite at high temperature.

Heat may cause the containers to explode.

#### Specific Hazards

Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember.

Containers can burst violently when heated, due to excess pressure build-up.

### 5.3. Advice for firefighters

#### Special Fire Fighting Procedures

Keep run-off water out of sewers and water sources. Dike for water control.

Cool containers exposed to flames with water until well after the fire is out.

If possible, fight fire from protected position.

Containers close to fire should be removed immediately or cooled with water.

Move container from fire area if it can be done without risk.

Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire.

For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Be aware of risk of fire re-starting, and risk of explosion.

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If risk of water pollution occurs, notify appropriate authorities.

## Protective Measures In Fire

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes.

Do not smoke, use open fire or other sources of ignition.

In case of inadequate ventilation, use respiratory protection.

Wear protective clothing as described in Section 8 of this safety data sheet.

Take precautionary measures against static discharges.

In case of spills, beware of slippery floors and surfaces.

### 6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

Do not allow ANY environmental contamination.

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

To prevent release, place container with damaged side up.

Contain spillages with sand, earth or any suitable adsorbent material.

Collect and dispose of spillage as indicated in section 13.

### 6.3. Methods and material for containment and cleaning up

Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted.

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

Remove sources of ignition.

Stop leak if possible without risk.

Small Spillages:

Let evaporate. Keep out of confined spaces because of explosion risk.

Large Spillages:

Dam and absorb spillages with sand, earth or other non-combustible material.

Shovel into dry containers. Cover and move the containers. Flush the area with water.

Should be prevented from entering drains.

Runoff or release to sewer, waterway or ground is forbidden.

Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

Clean-up personnel should use respiratory and/or liquid contact protection.

Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.

Collect and dispose of spillage as indicated in section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Keep away from heat, sparks and open flame.

Avoid spilling, skin and eye contact.

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

Avoid acids, moisture, and combustible materials.

Wear full protective clothing for prolonged exposure and/or high concentrations.

Do not use in confined spaces without adequate ventilation and/or respirator.

Static electricity and formation of sparks must be prevented.

Storage tanks and other containers must be grounded.

Use explosion proof electric equipment.

Do not handle broken packages without protective equipment.

Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

Avoid eating, drinking and smoking when using the product.

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

Flammable/combustible - Keep away from oxidisers, heat and flames.

Store in tightly closed original container in a dry and cool place.

May attack some plastics, rubber and coatings.

Ground container and transfer equipment to eliminate static electric sparks.

Take precautionary measures against static discharges.

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Do not store near heat sources or expose to high temperatures.

Unsuitable containers: aluminium.

Keep away from food, drink and animal feeding stuffs.

## Storage Class

Flammable liquid storage.

## 7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2. For further information see attached Exposure Scenario.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
Methanol Premium Grade	WEL	200 mg/m <sup>3</sup> (Sk)	266 mg/m <sup>3</sup> (Sk)	250 mg/m <sup>3</sup> (Sk)	333 mg/m <sup>3</sup> (Sk)	

WEL = Workplace Exposure Limit.

### Ingredient Comments

WEL = Workplace Exposure Limits

<b>DNEL</b>	Industry	Dermal	Long Term	40 mg/kg/day
<b>DNEL</b>	Industry	Inhalation.	Long Term	260 mg/m <sup>3</sup>
<b>DNEL</b>	Industry	Dermal	Short Term	40 mg/kg/day
<b>DNEL</b>	Industry	Inhalation.	Short Term	260 mg/m <sup>3</sup>
<b>DNEL</b>	Consumer	Dermal	Long Term	8 mg/kg/day
<b>DNEL</b>	Consumer	Inhalation.	Long Term	50 mg/m <sup>3</sup>
<b>DNEL</b>	Consumer	Dermal	Short Term	8 mg/kg/day
<b>DNEL</b>	Consumer	Inhalation.	Short Term	50 mg/m <sup>3</sup>
<b>DNEL</b>	Consumer	Oral	Short Term	8 mg/kg/day

### 8.2. Exposure controls

#### Protective Equipment



#### Process Conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Provide eyewash station.

#### Engineering Measures

If enclosed handling cannot be guaranteed, ventilation and protective clothing must be used.

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

All handling to take place in well-ventilated area.

Explosion-proof general and local exhaust ventilation.

#### Respiratory Equipment

If ventilation is insufficient, suitable respiratory protection must be provided.

At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used.

Supplied-air respirator with full facepiece, helmet or hood.

Chemical respirator with specific cartridge providing protection against the compound of concern.

Change filters frequently. Consult instructions before use.

#### Hand Protection

The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Use protective gloves made of:

Butyl rubber.

Viton rubber (fluor rubber).

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Polyethylene.

## Eye Protection

Wear approved safety goggles.

## Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Provide eyewash station.

## Hygiene Measures

Wash at the end of each work shift and before eating, smoking and using the toilet.

DO NOT SMOKE IN WORK AREA!

Promptly remove any clothing that becomes contaminated.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Clear liquid
Colour	Colourless
Odour	Alcoholic
Solubility	Soluble in water. Miscible with: Organic solvents.
Initial Boiling Point and Boiling Range:	64.6 760 mm Hg
Melting Point (°C)	-98
Relative Density	0.790 20
Bulk Density	790 kg/m <sup>3</sup>
Vapour Density (Air=1)	1.11
Vapour Pressure	13 kPa 20
Evaporation Rate	4 BuAc=1
Viscosity	0.614 mPas 20
Flash Point (°C)	10 CC (Closed cup).
Auto Ignition Temperature (°C)	400
Flammability Limit - Lower(%)	6.7
Flammability Limit - Upper(%)	36
Partition Coefficient (N-Octanol/Water)	-0.8

### 9.2. Other information

Refractive Index	1.3285
Mol. Weight	32
Volatility Description	Volatile.
Volatile By Vol. (%)	100

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Violent reaction with: Strong oxidising agents. Reaction with: Acids.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

#### Hazardous Polymerisation

Not relevant.

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with acids and oxidising substances.

### 10.5. Incompatible materials

#### Materials To Avoid

Strong oxidising substances. Strong acids. Alkali metals.

### 10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: TOXICOLOGICAL INFORMATION

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## 11.1. Information on toxicological effects

### Toxicological Information

Repeated exposure to concentrations above the WEL may result in systemic effects and ultimately blindness.

<b>Acute Toxicity (Oral LD50)</b>	> 1187 mg/kg Rat	Classified as toxic. There is a marked difference in acute oral toxicity between animals and man, man being more susceptible than animals.
<b>Acute Toxicity (Dermal LD50)</b>	> 2000 mg/kg Rat	Classified as toxic
<b>Acute Toxicity (Inhalation LC50)</b>	130 mg/l (vapours) Rat 4 hours	Classified as toxic Not Sensitising. Highly unlikely to be carcinogenic and are not classifiable as carcinogens
<b>Reproductive Toxicity</b>	NOAEC 1.33 Rat	Has produced evidence of teratogenic effects and foetotoxic effects in animal experiments but not sufficient for classification
<b>STOT - Single Exposure</b>	LOAEL 2000 mg/kg Oral Rat	<b>Target Organs</b> Eyes <b>Adverse Effects</b> Can cause blindness
<b>STOT - Repeated Exposure</b>	NOAEC 0.13 mg/l/6hr/day Inhalation. Rat	<b>Target Organs</b> Heart & cardiovascular system Brain Liver

### Inhalation

Toxic by inhalation. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death

### Ingestion.

Toxic: danger of very serious irreversible effects if swallowed. Swallowing concentrated chemical may cause severe internal injury. May cause nausea, headache, dizziness and intoxication.

### Skin Contact

Toxic: danger of serious damage to health by prolonged exposure in contact with skin. Toxic: danger of very serious irreversible effects in contact with skin. Repeated exposure may cause skin dryness or cracking.

### Eye Contact

Extreme irritation of eyes and mucous membranes, including burning and tearing. Risk of corneal damage.

### Route of entry

Inhalation. Ingestion. Skin and/or eye contact.

### Target Organs

Central nervous system Eyes Gastro-intestinal tract Skin

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity:

Not regarded as dangerous for the environment.

### 12.1. Toxicity

**Acute Toxicity - Fish** LC50 48 hours > 10000 mg/l Leuciscus idus (Golden orfe)

**Acute Toxicity - Aquatic Invertebrates** EC50 48 hours > 1000 mg/l Daphnia magna

**Acute Toxicity - Aquatic Plants** EC50 96 hours 22000 mg/l Selenastrum capricornutum

### 12.2. Persistence and degradability

#### Degradability:

The product is easily biodegradable. High concentrations may deplete oxygen levels.

### 12.3. Bioaccumulative potential

#### Bioaccumulative Potential:

Does not bioaccumulate significantly

**Partition Coefficient** Partition coefficient  
(n-octanol/water): -0.8

### 12.4. Mobility in soil

#### Mobility:

The product is soluble in water. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Spillages may penetrate the soil causing groundwater contamination

### 12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

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## 12.6. Other adverse effects

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

## SECTION 13: DISPOSAL CONSIDERATIONS

### General Information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

### 13.1. Waste treatment methods

Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

This material must be disposed of via an Authorised Waste/Disposal Company in accordance with Local and or National Waste Disposal Regulations.

### Waste Class

The user must be aware that the waste category of this product may be affected by the conditions of use. Please refer to Directive 2001/118/EC for waste nomenclature.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN No. (ADR/RID/ADN)	1230
UN No. (IMDG)	1230
UN No. (ICAO)	1230

### 14.2 UN Proper shipping name

Proper Shipping Name	METHANOL
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### 14.3 Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3 & 6.1
IMDG Class	3
ICAO Class/Division	3
ICAO Subsidiary risk	6.1
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant  
No.

### 14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	•2WE
Hazard No. (ADR)	336
Tunnel Restriction Code	(D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

# Methanol Premium Grade

Cat Y

## SECTION 15: REGULATORY INFORMATION

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

#### Uk Regulatory References

Health and Safety at Work Act 1974.

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

#### Statutory Instruments

Control of Substances Hazardous to Health.

#### Guidance Notes

Workplace Exposure Limits EH40.

#### EU Legislation

Dangerous Substance Directive 67/548/EEC.

Regulation (EC) No 1272/2008 CLP

Regulation (EC) No 1907/2006 REACH

### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

#### Revision Comments

Classification in line with CLP

<b>Issued By</b>	PCL Technical Team
<b>Revision Date</b>	28/07/2011
<b>Revision</b>	4
<b>Supersedes Date</b>	06/12/2010
<b>SDS No.</b>	20704
<b>Safety Data Sheet Status</b>	Approved.
<b>Date</b>	22/08/2202

#### Risk Phrases In Full

#### Hazard Statements In Full

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H330	Fatal if inhaled.
H370	Causes damage to organs <<Organs>>.

#### Disclaimer

The information in this document has been compiled on the basis of the best available knowledge in accordance with the legislative requirements. It does not imply that the information is complete or accurate in all cases. It is the user's responsibility to satisfy themselves as to the application of the information and/or the recommendations given for their own use.