

## SAFETY DATA SHEET

### METHANOL

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Product name	METHANOL
Product number	458
Synonyms; trade names	METHYL ALCOHOL, METHYL HYDRATE, WOOD SPIRIT, METHYL HYDROXIDE, SHIELD FL FG, DEKANOL VH, DERİ KİMYASALI (DEKANOL), VERAFLEXS (DEKANOL) VH, METHANOL, METHANOL MTX, METHANOL CHEMLAB
REACH registration number	01-2119433307-44-XXXX
CAS number	67-56-1
EU index number	603-001-00-X
EC number	200-659-6

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

Identified uses	Industrial Solvent For further information, see attached Exposure Scenario.
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##### 1.3. Details of the supplier of the safety data sheet

Supplier	RYE OIL LTD HARBOUR ROAD RYE EAST SUSSEX TN31 7TE T 01797 223374 F 01797 226991 info@ryeoil.co.uk
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##### 1.4. Emergency telephone number

Emergency telephone	01797 223374 office hours (8.00AM to 5.00PM)
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#### SECTION 2: Hazards identification

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

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

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 STOT SE 1 - H370
Environmental hazards	Not Classified

##### 2.2. Label elements

EC number	200-659-6
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# METHANOL

## Pictogram



## Signal word

Danger

## Hazard statements

H225 Highly flammable liquid and vapour.  
 H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.  
 H370 Causes damage to organs .

## Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P260 Do not breathe vapour/ spray.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P501 Dispose of contents/ container in accordance with national regulations.

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Product name	METHANOL
REACH registration number	01-2119433307-44-XXXX
EU index number	603-001-00-X
CAS number	67-56-1
EC number	200-659-6

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation	Get medical attention. Remove affected person from source of contamination.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Consult a physician for specific advice.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention.

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

Inhalation	Toxic if inhaled.
Ingestion	Toxic if swallowed. May cause unconsciousness, blindness and possibly death.
Skin contact	Toxic in contact with skin.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

## METHANOL

**Suitable extinguishing media** Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** The product is highly flammable.

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

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Avoid heat, flames and other sources of ignition. Take precautionary measures against static discharges. Provide adequate ventilation.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up** Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid inhalation of vapours and contact with skin and eyes. Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented. Provide adequate ventilation.

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

**Storage precautions** Store in tightly-closed, original container in a well-ventilated place. Suitable container materials: Mild steel. Stainless steel. Unsuitable containers: copper, zinc, aluminium, copper alloy, zinc alloy, aluminium alloy.

**Storage class** Toxic storage. Flammable liquid storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

## METHANOL

Sk

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m<sup>3</sup>

Sk = Can be absorbed through the skin.

WEL = Workplace Exposure Limit

**DNEL**

Workers - Inhalation; Long term systemic effects: 260 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term systemic effects: 260 mg/m<sup>3</sup>  
 Workers - Inhalation; Long term local effects: 260 mg/m<sup>3</sup>  
 Workers - Inhalation; Short term local effects: 260 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 40 mg/m<sup>3</sup>  
 Workers - Dermal; Long term systemic effects: 40 mg/kg/day  
 General population - Inhalation; Long term systemic effects: 50 mg/m<sup>3</sup>  
 General population - Inhalation; Short term systemic effects: 50 mg/m<sup>3</sup>  
 General population - Inhalation; Long term local effects: 50 mg/m<sup>3</sup>  
 General population - Inhalation; Short term local effects: 50 mg/m<sup>3</sup>  
 General population - Dermal; Long term systemic effects: 8 mg/kg/day  
 General population - Dermal; Short term systemic effects: 8 mg/kg/day  
 General population - Oral; Long term systemic effects: 8 mg/kg/day  
 General population - Oral; Short term systemic effects: 8 mg/kg/day

**DMEL**

Workers - Dermal; Long term systemic effects: 40 mg/kg/day

**PNEC**

- Fresh water; 20.8 mg/l  
 - Marine water; 2.08 mg/l  
 - Intermittent release; 1540 mg/l  
 - STP; 100 mg/l  
 - Sediment (Freshwater); 77 mg/kg  
 - Sediment (Marinewater); 7.7 mg/kg  
 - Soil; 100 mg/kg

### 8.2. Exposure controls

#### Protective equipment



**Appropriate engineering controls**

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection**

The following protection should be worn: Chemical splash goggles or face shield. EN 166

**Hand protection**

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Butyl rubber. glove thickness 0.7mm EN 374

**Other skin and body protection**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**Hygiene measures**

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

**Respiratory protection**

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX. EN 136/140/141/145/143/149

## SECTION 9: Physical and Chemical Properties

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

**METHANOL**

<b>Appearance</b>	Liquid.
<b>Colour</b>	Clear liquid.
<b>Odour</b>	Alcoholic.
<b>Odour threshold</b>	No information available.
<b>pH</b>	No information available.
<b>Melting point</b>	-97.8°C
<b>Initial boiling point and range</b>	64.5°C @ 760 mm Hg
<b>Flash point</b>	11°C
<b>Evaporation rate</b>	No information available.
<b>Evaporation factor</b>	No information available.
<b>Flammability (solid, gas)</b>	No information available.
<b>Upper/lower flammability or explosive limits</b>	No information available.
<b>Other flammability</b>	No information available.
<b>Vapour pressure</b>	No information available.
<b>Vapour density</b>	No information available.
<b>Relative density</b>	0.792 @ 20°C
<b>Bulk density</b>	No information available.
<b>Solubility(ies)</b>	Soluble in water. Soluble in the following materials: Chloroform. Ethanol. acetone Ether.
<b>Partition coefficient</b>	: -0.82 / -0.66
<b>Auto-ignition temperature</b>	385°C
<b>Decomposition Temperature</b>	No information available.
<b>Viscosity</b>	0.0006 Pa s
<b>Explosive properties</b>	No information available.
<b>Explosive under the influence of a flame</b>	No information available.
<b>Oxidising properties</b>	No information available.
<b><u>9.2. Other information</u></b>	
<b>Other information</b>	Not determined.
<b>Refractive index</b>	No information available.
<b>Particle size</b>	No information available.
<b>Molecular weight</b>	No information available.
<b>Volatility</b>	No information available.
<b>Saturation concentration</b>	No information available.
<b>Critical temperature</b>	No information available.
<b>Volatile organic compound</b>	No information available.

## METHANOL

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

#### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

#### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** The product is highly flammable.

#### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented.

#### 10.5. Incompatible materials

**Materials to avoid** Strong acids. Strong oxidising agents. Strong alkalis.

#### 10.6. Hazardous decomposition products

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

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 300.0

**Species** Human

**ATE oral (mg/kg)** 300.0

##### Acute toxicity - dermal

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 300.0

**Species** Human

**ATE dermal (mg/kg)** 300.0

##### Acute toxicity - inhalation

**ATE inhalation (gases ppm)** 700.0

**ATE inhalation (vapours mg/l)** 3.0

**ATE inhalation (dusts/mists mg/l)** 0.5

##### Skin corrosion/irritation

**Skin corrosion/irritation** Not irritating. Rabbit

##### Serious eye damage/irritation

**Serious eye damage/irritation** Not irritating. Rabbit

##### Respiratory sensitisation

**Respiratory sensitisation** No information available.

##### Skin sensitisation

## METHANOL

<b>Skin sensitisation</b>	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Bacterial reverse mutation test: Negative. Gene mutation: Negative.
<b>Genotoxicity - in vivo</b>	DNA damage and/or repair: Negative. Mouse
<b><u>Carcinogenicity</u></b>	
<b>Carcinogenicity</b>	NOAEL 466 mg/kg/day, Oral, Rat
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	No information available.
<b>Reproductive toxicity - development</b>	Embryotoxicity: - : , Oral, Mouse Negative. Fetotoxicity: - : , Oral, Mouse Positive.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	STOT SE 1 - H370
<b>Target organs</b>	Central nervous system Eyes
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	LOAEL 2340 mg/kg, Oral, Monkey NOAEL 1.06 mg/l, Inhalation, Rat 90 days
<b>Target organs</b>	Eyes Central nervous system
<b><u>Aspiration hazard</u></b>	
<b>Aspiration hazard</b>	No information available.
<b>Inhalation</b>	Toxic by inhalation. Drowsiness, dizziness, disorientation, vertigo.
<b>Ingestion</b>	Toxic if swallowed. May cause unconsciousness, blindness and possibly death.
<b>Skin contact</b>	Toxic in contact with skin.
<b>Eye contact</b>	May cause temporary eye irritation.
<b>Target organs</b>	Kidneys Liver Heart & cardiovascular system
<b>Medical considerations</b>	Liver and/or kidney damage.

### SECTION 12: Ecological Information

**Ecotoxicity** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### 12.1. Toxicity

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hours: 15400 mg/l, *Lepomis macrochirus* (Bluegill)  
NOEC, 200 hour: 15800 mg/l, *Oryzias latipes* (Red killifish)

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: > 10000 mg/l, *Daphnia magna*

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 96 hours: 22000 mg/l, *Selenastrum capricornutum*

**Acute toxicity - microorganisms** IC<sub>50</sub>, 15 hour: 20000 mg/l,  
IC<sub>50</sub>, 3 hour: > 1000 mg/l,

#### 12.2. Persistence and degradability

## METHANOL

**Persistence and degradability** The product is readily biodegradable.

**Biodegradation** Water - Degradation (%) 71.5: 5 days  
Water - Degradation (%) 95: 20 days

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** The product is not bioaccumulating. BCF: < 10, Leuciscus idus (Golden orfe)

**Partition coefficient** -0.82 / -0.66

### 12.4. Mobility in soil

**Mobility** The product is soluble in water.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Cod** 1.42

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

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

### 14.1. UN number

**UN No. (ADR/RID)** 1230

**UN No. (IMDG)** 1230

**UN No. (ICAO)** 1230

**UN No. (ADN)** 1230

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** METHANOL

**Proper shipping name (IMDG)** METHANOL

**Proper shipping name (ICAO)** METHANOL

**Proper shipping name (ADN)** METHANOL

### 14.3. Transport hazard class(es)

**ADR/RID class** 3

**ADR/RID subsidiary risk** 6.1

**ADR/RID classification code** FT1

**ADR/RID label** 3

**IMDG class** 3



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IMDG subsidiary risk	6.1
ICAO class/division	3
ICAO subsidiary risk	6.1
ADN class	3
ADN subsidiary risk	6.1

### Transport labels



### 14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN 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
ADR transport category	2
Emergency Action Code	•2WE
Hazard Identification Number (ADR/RID)	336
Tunnel restriction code	(D/E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

## SECTION 15: Regulatory information

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

EU legislation	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</p> <p>Commission Regulation (EU) No 2015/830 of 28 May 2015.</p> <p>This product may impact SEVESO storage regulations.</p>
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### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

## METHANOL

### Inventories

#### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ATE: Acute Toxicity Estimate.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>IATA: International Air Transport Association.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>Kow: Octanol-water partition coefficient.</p> <p>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</p> <p>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>IARC: International Agency for Research on Cancer.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p> <p>cATpE: Converted Acute Toxicity Point Estimate.</p> <p>BCF: Bioconcentration Factor.</p> <p>BOD: Biochemical Oxygen Demand.</p> <p>EC<sub>50</sub>: 50% of maximal Effective Concentration.</p> <p>LOAEC: Lowest Observed Adverse Effect Concentration.</p> <p>LOAEL: Lowest Observed Adverse Effect Level.</p> <p>NOAEC: No Observed Adverse Effect Concentration.</p> <p>NOAEL: No Observed Adverse Effect Level.</p> <p>NOEC: No Observed Effect Concentration.</p> <p>LOEC: Lowest Observed Effect Concentration.</p> <p>DMEL: Derived Minimal Effect Level.</p> <p>EL50: Exposure Limit 50</p> <p>hPa: Hectopascal</p> <p>LL50: Lethal Loading fifty</p> <p>OECD: Organisation for Economic Co-operation and Development</p> <p>POW: Octanol-water partition coefficient</p> <p>SCBA: self-contained breathing apparatus</p> <p>STP: Sewage Treatment Plant</p> <p>VOC: Volatile Organic Compounds</p>
<b>Classification abbreviations and acronyms</b>	<p>Acute Tox. = Acute toxicity</p> <p>Aquatic Acute = Hazardous to the aquatic environment (acute)</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p>
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Revision date</b>	31/01/2018
<b>Version number</b>	3.000

## METHANOL

<b>Supersedes date</b>	22/11/2016
<b>SDS number</b>	458
<b>SDS status</b>	Approved.
<b>Hazard statements in full</b>	H225 Highly flammable liquid and vapour. H301 Toxic if swallowed. H311 Toxic in contact with skin. H331 Toxic if inhaled. H370 Causes damage to organs .
<b>Signature</b>	JON REARDON DATE 21.10.2020