according to Regulation (EC) No 1907/2006

## **Ethanol / Methanol Gel**

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

## 1.1. Product identifier

Ethanol / Methanol Gel

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

### Use of the substance/mixture

Using material as fuel sources, limited exposure to unburned product to be expected

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable, Xi - Irritant

R phrases:

Highly flammable.

Irritating to eyes.

### **GHS** classification

Hazard categories:

Flammable liquid: Flam. Liq. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Highly flammable liquid and vapour.

Causes serious eye irritation.

# 2.2. Label elements

Signal word:

Danger

Pictograms:

GHS02-GHS07





#### **Hazard statements**

Highly flammable liquid and vapour.

Causes serious eye irritation.

# **Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash ... thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use Water. to extinguish.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container to disposal according legal regulations...

### 2.3. Other hazards

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).

# **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

### **Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-578-6	ethanol, ethyl alcohol	70 %
64-17-5	F - Highly flammable, Xi - Irritant R11-36	
603-002-00-5	Flam. Liq. 2, Eye Irrit. 2; H225 H319	
213-791-2	water	27 %
7732-18-5		
200-659-6	methanol	< 3 %
67-56-1	F - Highly flammable, T - Toxic R11-23/24/25-39/23/24/25	
603-001-00-X	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370 **	

Full text of R and H phrases: see Section 16.

## **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

## **General information**

In all cases of doubt, or when symptoms persist, seek medical advice. First aider: Pay attention to self-protection! Move victim out of danger zone.

### After inhalation

Provide fresh air. Remove casualty to fresh air and keep warm and at rest. In case of inhaling spray mist, consult a doctor immediately and show him packing or label.

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#### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, consult a physician.

## After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye. Consult an ophthalmologist.

## After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Danger of Blindness!

Induce vomiting when the affected person is not unconscious. On induced or spontaneous vomiting, bring the head of the victim in a lowered position to prevent aspiration.

If major quantitiy of dust is swallowed or inhaled, immediately drink:

Water with at least 100ml of 40% ethyl alcohole (ethanol).

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

methanol poisoning - danger of blindness

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

Treat symptomatically. First Aid, decontamination, treatment of symptoms.

# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

### Suitable extinguishing media

Water spray jet, Carbon dioxide (CO2), Foam, Extinguishing powder. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

# 5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

## 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

## **Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

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

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Vapours are heavier than air and will spread at floor level. Take precautionary measures against static discharge.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Spilled product must never be returned to the original container for recycling.

## 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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### **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

### Advice on safe handling

The formation of combustible vapours is possible at temperatures above: 18°C. Use only in well-ventilated areas. Keep away from sources of ignition. - No smoking. Flammable vapours can accumulate in head space of closed systems. Caution! Transport usually takes place at temperatures above the flash point.

## Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharge. Vapours can form explosive mixtures with air.

# Further information on handling

Do not breathe gas/fumes/vapour/spray.

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

## Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

# Further information on storage conditions

Suitable material for Container: Aluminium. steel. rustproof steel. Protect against: heat.

## 7.3. Specific end use(s)

Using material as fuel sources, limited exposure to unburned product to be expected

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

#### Additional advice on limit values

TLV-Name: Fuel Gel TLV-TWA (mg/m³): 5 TLV-STEL (ppm): 10

## 8.2. Exposure controls

## Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid contact with skin, eyes and clothes. Wash contaminated clothing prior to re-use. After work, wash hands and face. In the immediate working surroundings there must be: provide sufficient washing facilities provide eye wash and label its location conspicuously.

## **Respiratory protection**

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under

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normal conditions, breathing protection is not required. Respiratory protection necessary at: aerosol or mist generation.

Suitable respiratory protective equipment: gas filtering equipment (EN 141). AX

### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Suitable material: NBR (Nitrile rubber).

## Eye protection

Suitable eye protection: goggles.

Required properties: antistatic. liquid-tight.

### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: Paste
Colour: colourless
Odour: like: Alcohol

Test method

pH-Value: not determined

Changes in the physical state

Melting point: not determined Initial boiling point and boiling range: 85 °C Flash point: 18 °C

**Flammability** 

Solid: not applicable
Gas: not applicable
Lower explosion limits: 0,56 vol. %

Upper explosion limits: 8 vol. %

**Auto-ignition temperature** 

Solid: 425°C Gas: not applicable

**Oxidizing properties** 

Not oxidizing.

Vapour pressure: not determined Vapour pressure: 0,6 hPa

(at 50 °C)

Density: 0,803 g/cm³ Water solubility: 0 g/L

(at 20 °C)

Solubility in other solvents: not determined Partition coefficient: not determined

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Viscosity / kinematic: 3,97 mm²/s

(at 25 °C)

Vapour density: not determined Evaporation rate: not determined Solvent content: 562,1 g/l

9.2. Other information

Solid content: not determined

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Flammable, Ignition hazard. When handled according to chapters 6, 7 and 8 the product does not have any dangerous reactive properties.

# 10.2. Chemical stability

If handled according to the chapters 6, 7 and 8 the product is stable.

# 10.3. Possibility of hazardous reactions

There are no known dangerous reactions of this compound.

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

# 10.5. Incompatible materials

No information available.

# 10.6. Hazardous decomposition products

Carbon dioxide.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

## Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

### **Acute toxicity**

CAS No	Chemical name						
	Exposure routes	Method	Dose	Species	h		
64-17-5	ethanol, ethyl alcohol						
	Acute oral toxicity	LD50	6200 mg/kg	Rat			
	Acute inhalation toxicity	LC50	95,6 mg/l	Rat	4		
67-56-1	methanol						
	Acute oral toxicity	ATE	100 mg/kg				
	Acute dermal toxicity	ATE	300 mg/kg				
	Acute inhalation toxicity	ATE	0,5 mg/l				

### Irritation and corrosivity

Irritant effect on the eye: Not an irritant.

After skin contact: mild irritant.

If swallowed there is a risk of going blind.

### Sensitising effects

After skin contact: no danger of sensitization.

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# Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

#### **Further information**

There are no data available on the preparation/mixture itself. Data apply to the main component.

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Acute fish toxicity LC50: >100mg/l Acute Daphnia toxicity EC50: >100mg/l

Algae toxicity EC50: 100mg/l Bacterial toxicity: EC50: 100mg/l

CAS No	Chemical name		
	Aquatic toxicity	Method Dose	Species
64-17-5	ethanol, ethyl alcohol		
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	Daphnia magna 4

### 12.2. Persistence and degradability

The product has not been tested. Product is partially biodegradable. Significant residues remain. Mechanical separation in a suitable sewage plant is possible.

### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

## 12.4. Mobility in soil

The product has not been tested.

# 12.5. Results of PBT and vPvB assessment

The product has not been tested.

# 12.6. Other adverse effects

No information available.

## **Further information**

No special environmental measures are necessary.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

## Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

#### Waste disposal number of waste from residues/unused products

130703 OIL WASTES AND WASTES OF LIQUID FUELS (except edible oils, and those in chapters 05, 12 and 19); wastes of liquid fuels; other fuels (including mixtures)

Classified as hazardous waste.

# Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances Classified as hazardous waste.

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### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

## **SECTION 14: Transport information**

## Land transport (ADR/RID)

**14.1. UN number:** 1325

14.2. UN proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.; FUEL GEL

14.3. Transport hazard class(es):4.114.4. Packing group:IIHazard label:4.1Classification code:F1Limited quantity:LQ8Hazard No:40Tunnel restriction code:E

## Other applicable information (land transport)

Special provisions: 274 Limit Quantity: E2 Transport category: 2

## Inland waterways transport (ADN)

**14.1. UN number:** 1325

14.2. UN proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.; FUEL GEL

14.3. Transport hazard class(es):4.114.4. Packing group:IIHazard label:4.1Classification code:F1

## Other applicable information (inland waterways transport)

Special provisions: 274 Limit Quantity: E2

## Marine transport (IMDG)

Limited quantity:

**14.1. UN number:** 1325

**14.2. UN proper shipping name:** FLAMMABLE SOLID, ORGANIC, N.O.S.

LQ8

14.3. Transport hazard class(es):4.114.4. Packing group:IIHazard label:4.1Marine pollutant:•Limited quantity:1 kgEmS:F-A, S-G

# Other applicable information (marine transport)

Special provisions: 274, 915, 944

Limit Quantity: E2

## Air transport (ICAO)

UN/ID number: UN1325

14.2. UN proper shipping name: FLAMMABLE SOLID, ORGANIC, N.O.S.

14.3. Transport hazard class(es): 4.1 14.4. Packing group:

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Hazard label: 4.1
Special Provisions: A3
Limited quantity Passenger: 5 kg

IATA-packing instructions - Passenger: 445
IATA-max. quantity - Passenger: 15 kg
IATA-packing instructions - Cargo: 448
IATA-max. quantity - Cargo: 50 kg

Other applicable information (air transport)

Limit Quantity: E2 Passenger-LQ: Y415 Special provisions: A3 Passenger-LQ: Y441

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Flammable solids.

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

not applicable

## **SECTION 15: Regulatory information**

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

**EU** regulatory information

1999/13/EC (VOC): 70 % (562,1 g/l)

National regulatory information

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 1 - slightly water contaminating

**Additional information** 

100; 110

## 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

## Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

## Full text of R phrases referred to under Sections 2 and 3

Highly flammable.

Toxic by inhalation, in contact with skin and if swallowed.

Irritating to eyes.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

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## Full text of H statements referred to under Sections 2 and 3

Highly flammable liquid and vapour.

Toxic if swallowed.

Toxic in contact with skin.

Causes serious eye irritation.

Toxic if inhaled.

Causes damage to organs.

### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)