



# MATERIAL SAFETY DATA SHEET

Revised 24<sup>th</sup> June 2004

## METHYLATED SPIRITS MMS

### SECTION 1: IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY

**PRODUCT NAME:** Mineralised Methylated Spirits.  
**Chemical Family:** Denatured Ethanol  
**Company:** R.K. & J. Jones Limited  
**Address:** Southery Road, Feltwell  
Thetford, Norfolk  
IP26 4EH, UK.  
**EMERGENCY TELEPHONES:** 01842 828101

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS No.	EINECS	CONTENTS	HEALTH (class)	RISK (R No.)
ETHANOL	200-578-6	64-17-5	60-100%	F	11
METHANOL	200-659-6	67-56-1	5-10 %	F, T	11, 23/24/25, 39/23/24/25

The full text for all R- Phrases are shown in section 16.

### SECTION 3: HAZARDS IDENTIFICATION

Highly Flammable.

Harmful by inhalation. In contact with skin and if swallowed.

Harmful: possible risk of irreversible effects through inhalation. In contact with skin and if swallowed.

### SECTION 4: FIRST AID MEASURES

**General:** Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

**Inhalation:** Move the exposed person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

**Ingestion:** **NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!** Drink plenty of water. **DO NOT** induce vomiting. Get medical attention immediately.

**Skin:** Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if irritation persists after washing.

**Eyes:** Promptly wash with lots of water whilst lifting the lids. Continue to rinse for at least 15 minutes and get medical attention.

### SECTION 5 : FIRE FIGHTING MEASURES

**Extinguishing Media:** Use water spray, fog or mist. Alcohol resistant foam. Carbon Dioxide (CO<sub>2</sub>). Dry chemicals, sand, dolomite, etc.

**Special Fire Fighting Measures:**

Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

**Unusual Fire &**

**Explosion Hazards:**

Makes explosive in a fire. May form explosive or toxic mixtures with air. May explode in a fire. May travel considerable distance to source of ignition and flash back. Vapour explosion and poison hazard indoors, outdoors and in sewers. Solvent vapours may form explosive mixtures with air.

**Hazardous Decomposition Products:**

Fire creates: Carbon Monoxide (CO). Carbon Dioxide (CO<sub>2</sub>).

**SECTION 6: ACCIDENTAL RELEASE MEASURES/SPILLS AND LEAKS**

**Spill Cleanup Methods:**

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. Provide ventilation and confine spill. Do not allow run-off to sewer. Absorb in a vermiculite, dry sand or earth and place into containers. Do not allow runoff to drains. Do not contaminate water sources or sewer. Avoid contact with skin or inhalation of spillage, dust or vapour. Clean up personnel should use respiratory and/or liquid contact protection.

**SECTION 7 : HANDLING AND STORAGE**

**Usage Precautions:**

Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Wear full protective clothing for prolonged exposure and/or high concentrations. Do not use in confined spaces without adequate ventilation and/or respirator. Use explosion proof electrical equipment.

**Storage Precautions:**

Flammable/combustible- Keep away from oxidisers, heat and flames. May attack some plastics, rubber and coatings. Aluminium is not suitable. Ground container and transfer equipment to eliminate static electric sparks.

**Storage Criteria:**

Flammable liquid storage.

**SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION**

INGREDIENT NAME:	CAS No	STD	LT EXP. (8 hrs)	ST EXP. (15 min)
ETHANOL	64-17-5	OES	1000 ppm	No Std.
METHANOL	67-56-1	OES	200 ppm(Sk)	250 ppm(Sk)

**Ingredient Comments:**

OES= Occupational Exposure Standard.



**Protective Equipment:**

**Ventilation:**

Provide adequate ventilation and local exhaust ventilation. Must not be handled in confined space without sufficient

<b>Respirators:</b>	ventilation. Provide sufficient ventilation during operations which cause vapour formation. Respiratory protection must be used if air concentration exceeds acceptable level. If ventilation is insufficient, suitable respiratory protection must be provided. Gas cartridge (organic substances).
<b>Protective Gloves:</b>	Use suitable protective gloves if risk of skin contact. Use protective gloves made of: Butyl rubber. Nitrile.
<b>Eye Protection:</b>	Wear approved chemical safety goggles where eye exposure is reasonably probable. Contact lenses should not be worn when working with this chemical!
<b>Other Protection:</b>	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.
<b>Hygienic Work Routines:</b>	<b>DO NOT SMOKE IN WORK AREA!</b> Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

<b>Appearance:</b>	Liquid.
<b>Colour:</b>	Purple.
<b>Solubility Description:</b>	Miscible with water. Soluble in: Organic solvents (most).
<b>Boiling Point (°C):</b>	78. (for pure ethanol) @ 760mmHg
<b>Specific Gravity (Water = 1):</b>	0.825@ 20°C
<b>Vapour Density (air=1):</b>	1.59 (for pure ethanol)
<b>Vapour Pressure:</b>	5.81 (for pure ethanol) KPA @ 20°C
<b>Flash Point (°C):</b>	13 (for pure ethanol)
<b>Flash Point Method:</b>	CC (Closed Cup).
<b>Auto Ignition Temp.(°c):</b>	365
<b>Flammability Limit (lower %):</b>	3.5
<b>Flammability Limit (upper %):</b>	19

## SECTION 10 : STABILITY AND REACTIVITY

<b>Stability:</b>	Avoid: heat, sparks, flames.
<b>Conditions to Avoid:</b>	Avoid heat: Avoid contact with acids and oxidising substances.
<b>Materials to Avoid:</b>	Strong oxidising agents.
<b>Hazardous Decomposition Products:</b>	Toxic gases/vapour/fumes of Carbon Monoxide (CO), carbon dioxide. (Co2)

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Health Warnings:</b>	Gas or vapour is harmful on prolonged exposure or in high concentration. Irritant of eyes and mucous membranes. Toxic through skin absorption (percutaneous). Narcotic effect. Known or suspected teratogen. CNS depressant. Repeated exposure may cause chronic eye irritation. High concentrations may cause severe lung damage. Defatting, drying and cracking of skin. Swallowing concentrated chemical may cause severe internal injury. Unconsciousness death.
<b>Route of Entry:</b>	Inhalation. Ingestion. Skin and /or eye contact.
<b>Target Organs:</b>	Central Nervous System. Eyes. Gastro-intestinal tract. Liver. Respiratory system, lungs. Skin.

**Medical Symptoms:** Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Nausea, vomiting. Central nervous system depression. Behavioral changes. Hypotension (low blood pressure). Dizziness. Confusion, agitation and/or excitation.

**Medical Considerations:** Convulsive disorders, CNS problems.

**SECTION 12 : ECOLOGICAL INFORMATION**

**Environmental Hazards:** Bacterial inhibition tests show that the material is not inhibitory to biomass.

**Mobility:** This product will dissolve rapidly in water. If released to soil it will evaporate at a rapid rate. The product is poorly adsorbed onto soils or sediments.

**Bio Accumulation:** Product is not expected to bio accumulate.

**Degradability:** The product readily biodegradable. BOD5=37.74% of ThOD. BOD20=75-84% of ThOD. Considered by the United Nations as least important in the formation of episodic ozone.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Disposal Methods:** Dispose of in accordance with Local Authority requirements. Confirm disposal procedures with environmental engineer and local regulations.

**SECTION 14 : TRANSPORT INFORMATION**



**Label for Conveyance:**

**Road:**

<b>UN No:</b>	1170	<b>ADR Class No:</b>	3
<b>Hazard Class (ADR):</b>	Class 3; Flammable Liquids	<b>Hazard No.(ADR):</b>	33
<b>ADR Pack Group:</b>	II	<b>HAZCHEM Code:</b>	2YE
<b>ADR Label No:</b>	3		
<b>Proper Shipping Name:</b>	Ethanol Solution (Ethyl Alcohol Solution)		

**RAIL:**

<b>Rail Transport Class:</b>	3	<b>RID PACK GR:</b>	II
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**Sea:**

<b>UN Sea:</b>	1170	<b>EmS No.:</b>	3.06
<b>Sea Transport Class No:</b>	3	<b>Sea Pack Gr:</b>	II
<b>Marine Pollutant:</b>	No		

**AIR:**

<b>UN Air:</b>	1170	<b>Air Pack GR:</b>	II
<b>Air Transport Class No.:</b>	3		

## SECTION 15 : REGULATORY INFORMATION



HIGHLY FLAMMABLE



HARMFUL

### Labels for Supply:

#### Risk Phrases:

- R 11** Highly flammable.  
**R 20/21/22** Harmful by inhalation, in contact with skin and if swallowed.  
**R 68/20/21/22** Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

#### Safety Phrases:

- S 16** Keep away from sources of ignition-No smoking.  
**S 2** Keep out of reach of children.  
**S 36/37** Wear suitable protective clothing and gloves.  
**S 46** If swallowed seek medical advice immediately and show this container label.  
**S 51** Use only in well ventilated areas.

#### UK Regulatory References:

Health and Safety at Work Act 1974.  
The Control of Substances Hazardous to Health Regulations 1988. Chemicals (Hazard Information & Packaging) Regulations 1993.

#### UK Environmental Listings:

Environmental Protection Act 1990

#### Guidance Notes:

Occupational Exposure Limits EH40.

## SECTION 16 : OTHER HEALTH AND SAFETY INFORMATION

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customers responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.

**Note:** The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act,1974;the control of Substances Hazardous to Health Regulations,1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.

Ref. RKJ/MMS

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