

Ref: 102E – Industrial Methylated Spirits

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY:

- 1.1 Product Name:** **INDUSTRIAL METHYLATED SPIRITS**
- 1.2 Applications:** Denatured alcohol based polar solvent
- 1.3 Supplier:** Palace Chemicals Ltd; Speke Hall Industrial Estate; Speke; Liverpool; L24 4AB
Tel: 0151 486 6101; Fax 0151 448 1982
e-mail: sales@palacechemicals.co.uk; web: www.palacechemicals.co.uk
- 1.4 Emergency Telephone No.** Tel: 0151 486 6101 – Mon-Fri: 0800 - 1800

2. HAZARDS IDENTIFICATION:

- 2.1 Classification :**
(EC 1272/2008)
- H225 - Highly Flam. Liquid & vapour - Category 2**
H319 – Eye irritation – Category 2
H302 – Acute toxicity oral – Category 4
H371 - STOT Single – Category 2 (Methanol 3% <C<10%)

2.2
Label elements:

Signal Word: **DANGER**



Hazard statements: H225 – Highly Flammable liquid and vapour.
H302 – Harmful if swallowed
H319 – Harmful in contact with skin.
H371 - May cause damage to organs if swallowed.

Precautionary statements: P271 – Use only in a well ventilated area
P304 – If inhaled remove victim to fresh air and keep at rest in a comfortable breathing position
P311 – If exposed or if you feel unwell, call a doctor
P352 – If on skin wash with plenty of soap & water.
P363 – Wash contaminated clothing before re-use
P403 – Store in a well ventilated place
P405 – Store locked up
P101 - If medical advice is needed, have product container or label at hand.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P102 - Keep out of reach of children.
P103 - Read label before use.
P260 - Do not breathe vapours.
P262 - Do not get in eyes, on skin, or on clothing.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P403/235 Store in a well-ventilated place. Keep cool.

2.3
Other hazards:

3. COMPOSITION / INFORMATION ON INGREDIENTS:

3.1 Substances:

3.2 Mixtures: INDUSTRIAL METHYLATED SPIRITS

Name:	CAS / EC No.:	EC No.	Concentration:	Classification:
ETHANOL	64-17-5	200-578-6	95.0 – 97.0%	H225; H319
METHANOL	67-56-1	200-659-6	3.0 – 5.0%	H225; H371; H331; H301; H370



4. FIRST AID MEASURES:

4.1 Description of measures:

- EYE CONTACT:** Irrigate thoroughly for 15 minutes with clean running water or a boric saline eye wash bottle. Seek medical attention should eye irritation persist or become inflamed.
- INHALATION:** Avoid working in a poorly ventilated, confined space. Remove to fresh air and rest. If irritation or breathing difficulties persist, seek medical attention.
- SKIN CONTACT:** Wash off skin with warm soapy water. Remove contaminated clothing and launder regularly. Prolonged and unattended contact should be avoided. Where irritation to skin is apparent seek medical attention.
- INGESTION:** Clean out mouth with copious volumes of water and drink plenty. Do not induce vomiting. Beware of aspiration if vomiting occurs. Seek prompt medical attention and show this data sheet

4.2 Acute & Chronic symptoms:

- Inhalation:** Vapours inhaled in strong concentration have a narcotic effect on the central nervous system.
- 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 and unattended contact should be avoided. Where irritation to skin is apparent seek medical attention.
- Eye Contact:** Irritating and may cause redness and pain. May cause blurred vision and serious eye damage.

4.3 Immediate medical attention: Symptoms and effects of ingestion may be delayed for 18 to 24 hours and in some cases up to 72 hours. Ingestion of methanol may cause acidosis and damage to vision.

5. FIRE FIGHTING MEASURES:

- 5.1 Extinguishing media:** Dry powder; Foam, CO₂ – Do not use water jets.
- 5.2 Combustion Hazards:** Hazardous decomposition when subject to combustion – will produce noxious, irritating fumes.
- 5.3 Advice for fire-fighters:** Use approved self-contained breathing apparatus. Only use a fine water spray to cool down heat affected containers – not burning product. 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.

6. ACCIDENTAL RELEASE MEASURES:

- 6.1 Personal protection:** Ventilate area and eliminate all sources of ignition. Wear personal protective equipment recommended in section 8.
- 6.2 Environmental precautions:** Do not allow spill to enter drains or watercourses. Form a dam with sand, earth or a boom. Absorb, bund and scrape spillages onto sand, sawdust or absorbent granules.
- 6.3 Spill removal methods:** Confine residues in clearly marked sealed containers for disposal in accordance with Local Authority regulations for highly flammable products – subject to special waste management controls.
- 6.4 References 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. For waste disposal, see section 13.

7. HANDLING & STORAGE:

- 7.1 Safe handling precautions:** Eliminate all sources of ignition. Risk of vapour concentration on the floor and in low-lying areas. Static electricity and formation of sparks must be prevented. Use explosion proof electric equipment. Wear full protective clothing for prolonged exposure and/or high concentrations. Contaminated clothing and shoes must be discarded. Contaminated rags and cloths must be put in fireproof containers for disposal. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.
- 7.2 (a) Safe storage conditions:** Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Take precautionary measures against static discharges.
- 7.2 (b) Incompatible materials:** Keep away from oxidisers, heat and flames. May attack some plastics, rubber and coatings.
- 7.3 Specific end uses:** The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION:

8.1 Control parameters

Substance:	8 hour exposure limit	15 minute exposure limit	Source. Type
ETHANOL	1920 mg/m ³		
METHANOL	266 mg/m ³ (Sk)	333 mg/m ³ (Sk)	(Sk)

DNEL's - (Derived No effect levels) for workers – For Methanol component only (< 5%):

Exposure pattern:	Route	DNEL	Dose descriptor
Acute systemic effects -	Dermal	8.0 mg/kg/day	Consumer
Acute systemic effects -	Inhalation	50.0 mg/M3	Consumer
Acute Local effects -	Dermal	40.0mg/kg/day	Industry
Acute Local effects -	Inhalation	260.0 mg/M3	Industry
Long term systemic effects -	Dermal	8.0 mg/kg/day	Consumer
Long term systemic effects -	Inhalation	50.0 mg/M3	Consumer
Long term local effects -	Dermal	40.0mg/kg/day	Industry
Long term local effects -	Inhalation	260.0 mg/M3	Industry

PNEC's - Predicted No effect concentration (Environment):

Compartment:	PNEC	Dose Descriptor
Fresh water -		
Sewage treatment -		

8.2 Exposure controls:

Engineering controls: Provide adequate general and local exhaust ventilation.

Respiratory protections: No specific recommendation is made, but appropriately specified respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection: Protective gloves must be used. 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 nitrile.



Eye protection: BS 2092 approved safety Goggles should be worn for all applications to help prevent accidental face/eye contact.



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

Hygiene measures: **DO NOT SMOKE IN WORK AREA!**
Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap & water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

9. PHYSICAL & CHEMICAL PROPERTIES:

Appearance:	Clear liquid	Relative density:	0.805 – 0.825
Odour:	Alcoholic odour	Water solubility:	100%
Odour threshold:	Lower	Solubility in oils:	In polar solvents
pH:	n/a	Partition coefficient (Kow):	n/a
Flash point:	17.5°C	Auto-ignition temperature:	365°C
Melting point:	-112°C	Decomposition temperature:	n/a
Boiling point:	78°C	Surface tension:	n/a
Evaporation rate:	9.2	Viscosity:	n/a
Upper/Lower Flam limits:	19.0% - 3.5%	Explosive properties:	May form explosive mixtures with air.
Vapour pressure:	5.81(for pure ethanol) kPa 20	Oxidising properties:	n/a
Vapour density:	1.59 (for pure ethanol)	Particle size:	n/a

10. STABILITY & REACTIVITY:

10.1 Conditions to avoid:	Sources of ignition. Avoid static discharge.	10.4 Reactivity:	Stable except when ignited
10.2 Incompatible Materials:	Acids & Oxidising agents	10.5 Chemical reactivity:	Stable under the prescribed storage conditions.
10.3 Decomposition hazards:	Fire creates toxic fumes	10.6 Risk of hazardous reaction:	None under normal use.

11. TOXICOLOGICAL INFORMATION:

11.1 Information on toxicological effects: This product has not been exhaustively tested. Judgements on the expected toxicity of this product have been made based upon consideration of its' major components.

Routes of exposure:	Inhalation, skin contact and ingestion.	Skin Corrosivity / Irritation:	May cause de-fatting of the skin,
Eye damage/irritation:	Burning feeling and temporary redness.	Respiratory/skin sensitisation:	n/a
Reproductive toxicity:	n/a	Germ cell Mutagenicity:	n/a
STOT single exposure:	LD50 - 7060 (for ethanol) mg/kg (oral rat)	Carcinogenicity:	No evidence of carcinogenic properties
STOT repeat exposure:	Target Organs - Central nervous system Respiratory system, lungs	Aspiration hazard:	Avoid vomiting and normal rinse of stomach because of risk of aspiration.

12. ECOLOGICAL INFORMATION:

12.1 Ecotoxicity:	LC50 96 hours ~ 14200 - 15400 fathead minnows	12.4 Mobility in soil:	100% degradable in 28 days
12.2 Bio-accumulative potential:	Negligible due to high volatility	12.5 PBT and vPvB result:	Not Classified as PBT/vPvB
12.3 Persistence & degradability:	The substance is readily biodegradable.	12.6 Other adverse effects:	n/a

13. DISPOSAL CONSIDERATIONS:

13.1 Waste treatment Methods: Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. Waste is suitable for incineration. Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket. Where possible packaging should be collected for reuse or recycling.

14. TRANSPORT INFORMATION:

Transport Labels:



Regulatory Code (Land, Sea & Air):	ADR	IMDG	ICAO
14.1 UN No.:	1170	1170	1170
14.2 Proper shipping name:	ETHANOL SOLUTION	ETHANOL SOLUTION	ETHANOL SOLUTION
14.3 ADR Packing Group:	II	II	II
14.4 Transport Hazard Class:	Class 3: Flammable liquids.	3	3
14.5 Environmental hazards.	n/a	n/a	n/a
14.6 Special user precautions:	Emergency Action Code 2YE		HAZCHEM CODE 2YE
14.7 Transport in bulk – IBC code:	HAZARD No. (ADR) 33	Tunnel Restriction Code (D/E)	



15. REGULATORY INFORMATION:

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

All components are listed as existing substances in Europe

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. Chemicals (Hazard Information & Packaging) Regulations.

Environmental Listing - Control of Pollution Act 1974. Control of Pollution (Special Waste Regulations) Act 1980.

Statutory Instruments:

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes:

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).

EU Legislation:

Dangerous Substance Directive 67/548/EEC.

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), establishing a European

Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

National Regulations:

Users of this product are reminded of their duties under the current Control of Substances Hazardous to Health Regulations and a suitable and sufficient assessment of all the risk should be undertaken before using this product. The guidelines given in the HSE publication COSHH ESSENTIALS - Easy Steps To Control Chemicals gives sound advice for deciding safe working control measures.

Authorisations (Title VII Regulation 1907/2006) - No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006) - No specific restrictions of use are noted for this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this product.

16. OTHER INFORMATION:

Last revision date: 24th October 2014

SDS No.: 102E

List of abbreviations used in this SDS:

CAS	Chemical abstracts service
CLP	Classification, labelling & packaging regulation (EC) No. 1272/2008
DSD	Dangerous substances Directive 67/548/EEC
DPD	Dangerous Products Directive 1999/45/EC
PBT	Persistent, Bio-accumulative & Toxic
REACH	Registration, Evaluation, Authorisation & Restriction of Chemicals Regulation (EC) 1907/2006
vPvB	Very Persistent, very Bio-accumulative

References: Volume VII Approved supply list; EH40; Croner; Bulk supplier data sheets

Classification methods:

R phrases in Section 3:

R11 - HIGHLY FLAMMABLE

R20/21/22 - HARMFUL by inhalation, in contact with skin & if swallowed

R68/20/21/22 - HARMFUL: Possible risks of irreversible effects through inhalation, skin contact & if swallowed

H Phrases in section 3:

H225 – Highly Flammable liquid and vapour.

H302 – Harmful if swallowed

H312 – Harmful in contact with skin.

H332 – Harmful if inhaled

H301 - Toxic if swallowed.

H371 – May Cause damage to organs if swallowed <<EYES, KIDNEYS; LIVER>>.

Training for workers:

Disclaimer:

The information supplied in this safety data sheet is intended to assist in the use of the above product without risk to safety and health and is based on current knowledge and experience of the associated physico-chemical hazards. The data does not signify any warranty with regard to the product's properties. This information may be used to assist in formulating a COSHH risk assessment if applied at work. This data sheet complies with EC Directive 91/155EC.