

Brodie&Middleton Ltd

Safety Data Sheet according to Directive 91/155/EC

Revision Date: November 2015

1) Identification of the substance/preparation and the company

Trade Name: Brodie&Middleton Methylated Spirit

Application: Solvent

Manufacturer/Supplier:

Brodie&Middleton Ltd

30-31 Store Street

London WC1E 7QE

Telephone: 020-7836 7521

Fax: 020-7636 8733

2) Composition/Information on ingredients

Substances:

Mixtures: MINERALISED METHYLATED SPIRITS

Name	CAS/EC No	Concentration	Classification
ETHANOL	64-17-5	>90.0%	H225; H319
PROPAN-2-OL	67-56-1	< 5.0%	H225; H319; H336
BUTANONE	78-93-3	< 1.0%	H225; H319; H336
DENATONIUM BENZOATE	3734-33-6	< 0.5%	H302; H332

3) Hazards Identification

Classification: H225 - Highly Flammable liquid & vapour – Category 2

(EC 1272/2008) H318 – Category 2 eye irritant

Label elements: Key Word: **DANGER**



Hazard statements: H225 - Highly Flammable liquid & vapour

H319 – Causes serious eye irritation

Precautionary statements: P271 – Use only in a well ventilated area

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.
P102 - Keep out of reach of children.
P103 - Read label before use.
P262 - Do not get in eyes, on skin, or on clothing.
P233 Keep container tightly closed.

Other hazards:

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.
P403 – Store in a well ventilated place & P405 – Store locked up

4) First Aid Measures

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. 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.

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.

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

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

Personal protection: Ventilate area and eliminate all sources of ignition. Wear personal protective equipment recommended in Sect 8.

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.

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.

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 and Storage

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 acceptable level.
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.
Incompatible materials:	Keep away from oxidisers, heat and flames. May attack some plastics, rubber and coatings.
Specific end uses:	The identified uses for this product are detailed in Section 1

8) Exposure/Personal Protection

Control parameters

Substance	8 hour exp limit	15 minute exp limit	Source.Type
ETHANOL	1920 mg/m ³		
BUTANONE	600 mg/m ³	900 mg/m ³ (Sk)	(Sk)
PROPAN-2-OL	1250 mg/m ³	999 mg/m ³	

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.
Recommended Filter type: A.

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 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.

9) Physical and chemical Properties

Appearance:	Clear Purple
Odour:	Alcohol like odour
Odour threshold:	Lower
pH:	n/a
Flash point:	12°C
Melting point:	n/a
Boiling point:	78°C

Evaporation rate:	n/a
Upper/Lower Flam limits:	19.0% - 3.5%
Vapour pressure:	5.81(for pure ethanol) kPa 20
Vapour density:	1.59 (for pure ethanol)
Relative density:	0.805 – 0.825
Water solubility:	100%
Solubility in oils:	In polar solvents
Partition coefficient (Kow):	n/a
Auto-ignition temperature:	>356°C
Decomposition temperature:	n/a
Surface tension:	n/a
Viscosity:	n/a
Explosive properties:	May form explosive mixtures with air.
Oxidising properties:	n/a
Particle size:	n/a

10) Stability and Reactivity

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

11) Toxicological Information

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.
Eye damage/irritation:	Burning feeling and temporary redness.
Reproductive toxicity:	n/a
STOT single exposure:	LD50 - .5000 (for ethanol) mg/kg (oral rat)
STOT repeat exposure:	Target Organs – Central nervous system. Respiratory system, lungs.
Skin Corrosivity / Irritation:	May cause de-fatting of the skin.
Respiratory/skin sensitisation:	n/a

Germ cell Mutagenicity:	n/a
Carcinogenicity:	No evidence of carcinogenic properties
Aspiration hazard:	Avoid vomiting and normal rinse of stomach because of risk of aspiration.

12) Ecological Information

Ecotoxicity:	LC50 96 hours ~>2000
Bio-accumulative potential:	Negligible due to high volatility
Persistence & degradability:	The substance is readily biodegradable.
Mobility in soil:	100% degradable in 28 days
PBT and vPvB result:	Not Classified as PBT/vPvB
Other adverse effects:	n/a

13) Disposal Information

Disposal:	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.
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14) Transport Information

Regulatory Code (Land, Sea & Air):

ADR

UN No.:	1170
Proper shipping name:	ETHANOL SOLUTION
ADR Packing Group:	II
Transport Hazard Class:	Class 3: Flammable liquids.
Environmental hazards.	n/a
Special user precautions:	Emergency Action Code 2YE
Transport in bulk – IBC code:	HAZARD No. (ADR) 33

IMDG

UN No.:	1170
Proper shipping name:	ETHANOL SOLUTION
ADR Packing Group:	II
Transport Hazard Class:	Class 3: Flammable liquids.
Environmental hazards.	n/a
Special user precautions:	Emergency Action Code 2YE
Transport in bulk – IBC code:	Tunnel Restriction Code (D/E)

ICAO

UN No.:	1170
Proper shipping name:	ETHANOL SOLUTION
ADR Packing Group:	II
Transport Hazard Class:	Class 3: Flammable liquids.
Environmental hazards:	n/a
Special user precautions:	HAZCHEM CODE 2YE

15) Regulatory Information

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/ 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 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)

Restrictions (Title VIII Regulation 1907/2006)

Chemical safety assessment

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

16) Other information

H Phrases in section 3: H225 – Highly Flammable liquid and vapour.
 H319 - Causes serious eye irritation.
 H302 – Harmful if inhaled.
 H336 – May cause drowsiness or dizziness
 H332 – Harmful if inhaled.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist