Revision Date 03/02/2015
Revision 6
Supersedes date 11/07/2014

SAFETY DATA SHEET
BARTOLINE METHYLATED SPIRITS

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name BARTOLINE METHYLATED SPIRITS

Synonyms, Trade Names Completely Denatured Alcohol

REACH Registration notes Registration number is not applicable as this is a mixture.

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

Identified uses AS A FUEL FOR CAMPING STOVES AND GENERAL CLEANING

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier

Bartoline limited
Barmston Close
Beverley
East Yorkshire
HU17 0LW
01482 678710
fax 01482 872606
HSE MANAGER
www.bartoline.co.uk

1.4. Emergency telephone number

01482 678727 0800-1700 Monday to Friday NHS 111 SERVICE (24 Hour General Public)

National Emergency Telephone Number

National Poisons Information Service (24hours) 0844 892 0111

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Not classified.
Environment	Not classified.

Classification (1999/45/EEC) F;R11.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

Signal Word Danger

Hazard Statements

H225	Highly flammable liquid and vapour.

Precautionary Statements

P103	Read label before use.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves.

P280	Wear eye protection.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+235	Store in a well-ventilated place. Keep cool.
	P501 Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ETHANOL **60-100%**

CAS-No.: 64-17-5 **EC No.: 200-578-6** **Registration Number: 01-2119457610-43-XXXX**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11

ISOPROPANOL **1-5%**

CAS-No.: 67-63-0 **EC No.: 200-661-7** **Registration Number: 01-2119457558-25-XXXX**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
Eye Irrit. 2 - H319	Xi;R36
STOT SE 3 - H336	R67

Methyl Ethyl Ketone **1-5%**

CAS-No.: 78-93-3 **EC No.: 201-159-0** **Registration Number: 01-2119457290-43-XXXX**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Flam. Liq. 2 - H225	F;R11
EUH066	Xi;R36
Eye Irrit. 2 - H319	R66
STOT SE 3 - H336	R67

Denatonium Benzoate **< 1%**

CAS-No.: 3734-33-6 **EC No.: 223-095-2**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Xn;R22.
Skin Irrit. 2 - H315	Xi;R36/37/38.
Eye Irrit. 2 - H319	
STOT SE 3 - H335	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration notes Registration number is not applicable as this is a mixture.

Ingredient notes

This product complies with the Denatured Alcohol Regulations 2013

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! NOTE! Keep affected person away from heat, sparks and flames!

Inhalation

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

Ingestion

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing.

Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

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

General information

If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

Inhalation

Irritation of nose, throat and airway. Vapours may cause headache, fatigue, dizziness and nausea. In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects.

Ingestion

May cause stomach pain or vomiting. Drowsiness, dizziness, disorientation, vertigo. Ingestion of large amounts may cause unconsciousness.

Skin contact

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. This substance is rapidly absorbed through the skin and may cause symptoms similar to those of ingestion.

Eye contact

May cause temporary eye irritation.

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

No specific chemical antidote is known to be required after exposure to this product. Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with foam, carbon dioxide or dry powder. Water spray, fog or mist.

Unsuitable extinguishing media

Nonalcohol resistant foam

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

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

Unusual Fire & Explosion Hazards

HIGHLY FLAMMABLE! May explode when heated or when exposed to flames or sparks. May travel considerable distance to source of ignition and flash back. May form explosive or toxic mixtures with air. May ignite at high temperature. Heat may cause the containers to explode.

Specific hazards

Vapours are heavier than air and may travel along the floor and in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. Containers can burst violently when heated, due to excess pressure build-up.

5.3. Advice for firefighters

Special Fire Fighting Procedures

If possible, fight fire from protected position. Containers close to fire should be removed immediately or cooled with water. Cool containers exposed to flames with water until well after the fire is out. Water spray should be used to cool containers. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Be aware of risk of fire re-starting, and risk of explosion. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes. Follow precautions for safe handling described in this safety data sheet. Take precautionary measures against static discharges. Eliminate all ignition sources Wear protective clothing as described in Section 8 of this safety data sheet. In case of inadequate ventilation, use respiratory protection. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Do not allow ANY environmental contamination. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. To prevent release, place container with damaged side up. Contain spillages with sand, earth or any suitable adsorbent material. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

Remove sources of ignition. 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. Small Spillages: Let evaporate. Keep out of confined spaces because of explosion risk. Large Spillages: Dam and absorb spillages with sand, earth or other non-combustible material. Shovel into dry containers. Cover and move the containers. Flush the area with water. Runoff or release to sewer, waterway or ground is forbidden. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Spillage may be stored as chemical waste in approved area. When dealing with a spillage, please consult the section relating to suitable protective measures. Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage.

6.4. Reference 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. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Use explosion proof electric equipment. Static electricity and formation of sparks must be prevented. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not use in confined spaces without adequate ventilation and/or respirator. Do not handle broken packages without protective equipment. Avoid eating, drinking and smoking when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Ground container and transfer equipment to eliminate static electric sparks. Take precautionary measures against static discharges.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Usage Description

Keep containers closed when not in use. Always follow on pack instructions regarding mixing ratios When filling heating applicances ensure that there is adequate ventilation. Apply "common sense" measures when using this product. Avoid all contact with skin and eyes. DO NOT use in confinded space areas or in areas where these is poor ventilation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANOL	WEL		1920 mg/m3			
ISOPROPANOL		400 ppm	999 mg/m3	500 ppm	1250 mg/m3	
Methyl Ethyl Ketone	WEL	200 ppm(Sk)	600 mg/m3(Sk)	300 ppm(Sk)	899 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

ETHANOL (CAS: 64-17-5)

Ingredient Comments

The figures quoted below are taken from the registration document.

DNEL

Industry	Inhalation.	Short Term	Local Effects	1900 mg/m3
Industry	Dermal	Long Term	Systemic Effects	343 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	950 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	206 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	114 mg/m3
Consumer	Oral	Long Term	Systemic Effects	87 mg/kg/day

Data quoted is taken from the substance registration document.

PNEC

Freshwater	Long Term	0.96	mg/l
Marinewater	Long Term	0.79	mg/l
Water	Intermittent release	2.75	mg/l
STP	Long Term	580	mg/l
Sediment (Freshwater)	Long Term	3.6	mg/kg
Sediment (Marinewater)	Long Term	2.9	mg/kg
Soil	Long Term	0.63	mg/kg

PNEC data extracted from registration document

ISOPROPANOL (CAS: 67-63-0)

DNEL

Industry	Dermal	Long Term	Systemic Effects	888 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	500 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	319 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	89 mg/m3
Consumer	Oral	Long Term	Systemic Effects	26 mg/kg/day

Data quoted is taken from the substance registration document.

PNEC

Industry	Freshwater	Long Term	140.9 mg/l
Industry	Marinewater	Long Term	140.9 mg/l
Industry	STP	Long Term	2251 mg/l

No PNEC data available for this substance.

Methyl Ethyl Ketone (CAS: 78-93-3)

Ingredient Comments

The figures quoted below are taken from the registration document.

DNEL

Industry	Inhalation.	Long Term	Systemic Effects	600 mg/m3
Industry	Dermal	Long Term	Systemic Effects	1161 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	106 mg/m3
Consumer	Dermal	Long Term	Systemic Effects	412 mg/kg/day
Consumer	Oral	Long Term	Systemic Effects	31 mg/kg/day

PNEC

Industry	Freshwater	Long Term	55.8 mg/l
Industry	Marinewater	Long Term	55.8 mg/l
Industry	Intermittent release	Intermittent release	55.8 mg/l
Industry	STP	Long Term	709 mg/l

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Nitrile.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Violet.
Odour	Alcohol
Solubility	Emulsible in water. Insoluble in: Organic solvents.
Initial boiling point and boiling range (°C)	80 760 mm Hg

Melting point (°C)

Not available.

Relative density	0.825 20
Vapour density (air=1)	1.5
Vapour pressure	5.81 kPa 20
Evaporation rate	3.1

Evaporation Factor

Not available.

pH-Value, Conc. Solution	6-7

Viscosity

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point (°C)	13 CC (Closed cup).
Auto Ignition Temperature (°C)	400
Flammability Limit - Lower(%)	3.5
Flammability Limit - Upper(%)	19

Partition Coefficient (N-Octanol/Water)

Not available.

Explosive properties

Not applicable.

More sensitive to shock than m-dinitrobenzene.

No

More sensitive to friction than m-dinitrobenzene.

No

Other Flammability

Not available.

Oxidising properties

Does not meet the criteria for oxidising.

Comments	Information given concerns the concentrated solution. Information declared as "Not available" or "Not applicable" is not considered to be justified for enabling proper control measures to be taken.

9.2. Other information

Volatility Description	Highly volatile.
Volatile By Vol. (%)	100
Volatile Organic Compound (VOC)	825g/l

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Acids. Strong oxidising agents.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Reacts with strong oxidising agents

Hazardous Polymerisation

Not relevant

10.4. Conditions to avoid

Avoid contact with oxidisers or reducing agents. Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Alkali metals.

10.6. 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

Toxicological information

There is no data for the product as a whole. The data for the hazardous constituents is shown below.

Toxicological information on ingredients.

Acute toxicity:

Acute Toxicity (Oral LD50)

~ 10470 mg/kg Rat

In a guideline acute oral toxicity study, the LD50 was determined to be 10470 mg/kgbw when dosed as a 95% solution in water.

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 15800 mg/kg Rabbit

A source reported that the in an acute dermal toxicity study, a single dose of 15800mg/kg caused the death of 1 out of 4 rabbits. This indicates that the LD50 is greater than 15800mg/kg.
Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 117 mg/l (vapours) Rat 4 hours

In an acute inhalation study that approximated to guideline, ethanol vapour was found to be of very low acute toxicity to male and female rats. The LC50 (4hr) was established to be around the 117 -125mg/l and the LC0 around 62mg/l. It is worthy of note that the LD50 is well above the lower explosive limit (LEL).
Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

In a guideline and GLP skin irritation study, 0.2 ml of ethyl alcohol was applied to an intact skin test site on each of five New Zealand albino rabbits using two strips of 6 inch scanpor tape with a continuous wrap of 1/2 inch adhesive tape for 24 hours. After 24 hours exposure (longer than required by the guideline) the test sites were exposed and wiped. The sites were examined for erythema and edema at 1, 2, 3, 4, 5 and 7 days. Alcohol was found to produce no significant irritation and was therefore concluded to be non irritating to rabbit skin.
Not irritating.

Serious eye damage/irritation:

Slightly Irritating. In a reference handbook of peer reviewed, guideline GLP eye irritation study results in rabbits, ethanol was found to cause eye irritation. All symptoms reversed within 14 days. The response was not sufficiently severe to trigger classification under the criteria of directive 67/548 but was sufficient with respect to the corneal and conjunctival effects to trigger classification as a reversible eye irritant (category 2) under the EU GHS regulation.

Respiratory or skin sensitisation:

Respiratory sensitisation

Not applicable.
Guinea Pig
Not sensitising.

Skin sensitisation

Not applicable.
Local Lymph Node Assay (LLNA) Mouse
A study was carried out to evaluate the effect of vehicles (ethanol or diethyl phthalate) for use in the mouse local lymph node assay (LLNA), and their influence on the skin sensitization potential of four test fragrance materials (p-t-butyl-alpha-methylhydrocinnamic aldehyde; geraniol; eugenol; and hydroxycitronellal). Groups of 4 mice were treated with each test fragrance, at one of five concentrations, either in ethanol or diethyl phthalate (and 1:3 or 3:1 mixtures of the two), or with ethanol (or diethyl phthalate) alone. Although there were no true control data for comparison with the ethanol-alone treated animals, the level of induced T-lymphocyte proliferation was low for ethanol when compared with that for fragrance materials known to be mild to moderate skin sensitizers, and comparable to that for the other (negative) control vehicle tested, diethyl phthalate.
Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Gene Mutation:

In a mammalian cell mutation study using mouse lymphoma lymphoma cells in the TK forward mutation assay, ethanol was found to be non mutagenic with and without metabolic activation at very high doses up to and including those that cause significant cytotoxicity (typically in the region 0.3 -0.5M.
Negative.

Carcinogenicity:

This substance has no evidence of carcinogenic properties.

Reproductive Toxicity:

Overall, ethanol in drinking water at concentrations up to 15% (equivalent to 20.7 g/kg/day) had no demonstrable effect on fertility in this two-generation study.

ISOPROPANOL (CAS: 67-63-0)

Acute toxicity:

Acute Toxicity (Oral LD50)

~ 5500 mg/kg Rat

Acute Toxicity (Dermal LD50)

~ 16.4 mg/kg Rabbit

Acute Toxicity (Inhalation LC50)

> 10000 ppmV (gas) Rat 4 hours

Due to transient concentration-related narcosis and central nervous system sedation effects, the substance should be classified under STOT single exposure category 3, H336 - may cause drowsiness or dizziness, according to CLP classification criteria

Methyl Ethyl Ketone (CAS: 78-93-3)

Acute toxicity:

Acute Toxicity (Oral LD50)

~ 3460 mg/kg Rat

REACH dossier information

Acute Toxicity (Dermal LD50)

> 10 mg/kg Rabbit

REACH dossier information

Skin Corrosion/Irritation:

REACH dossier information Read Across information/data

There were no skin reactions following the application of undiluted secondary butyl alcohol to rabbit skin for 4 hours. The test material is therefore not a skin irritant in rabbits.

Respiratory or skin sensitisation:

Skin sensitisation

Not applicable.

Undiluted methyl ethyl ketone elicited a slight erythematous response in one of the test animals following the challenge application. This response was deemed inconclusive. The results for the remaining guinea pigs were negative. Under the conditions of the study, MEK was not considered to be a skin sensitiser in guinea pigs.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Not applicable.
Gene Mutation:
Negative.

Genotoxicity - In Vivo

Not applicable.
Chromosome aberration:
Negative.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

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

the toxilogical data for the hazardous ingredients is shown below.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Acute Toxicity - Fish

LC50 48 hours ~ 14, 200 mg/l Pimephales promelas (Fat-head Minnow)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 5012 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

EC50 48 hours > 100 mg/l Selenastrum capricornutum

ISOPROPANOL (CAS: 67-63-0)

LC 50, 96 Hrs, Fish mg/l

9640 - 10400

EC 50, 48 Hrs, Daphnia, mg/l

2285 - 13299

Methyl Ethyl Ketone (CAS: 78-93-3)

LC 50, 96 Hrs, Fish mg/l

2993

EC 50, 48 Hrs, Daphnia, mg/l

308

IC 50, 72 Hrs, Algae, mg/l

2029

12.2. Persistence and degradability

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Degradability

The biodegradation of ethanol was assessed at a number of concentrations using a non-adapted domestic sewage innoculum in a freshwater medium using a 20 day study.. Rapid degradation was observed. Based on the results of this study, ethanol meets the criteria to be classified as readily biodegradable.

This study is classified as acceptable and satisfies the guideline requirement for a ready biodegradation study.

Results synopsis

BOD5=74%, BOD15=95%.

ISOPROPANOL (CAS: 67-63-0)

Degradability

The product is not expected to be biodegradable.

A BOD5/COD ratio ≥ 0.5 is considered as indicative of rapid degradation. Thus, a substance which passes this screening test is considered likely to biodegrade 'rapidly' in the aquatic environment, and is thus unlikely to be persistent.

The substance is readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient

Not available.

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Bioaccumulative potential

Does not bioaccumulate significantly.

Partition coefficient

log Pow ~ 0.31

12.4. Mobility in soil

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is water soluble and may spread in water systems. This product will dissolve rapidly in water Large volumes may penetrate soil and could contaminate groundwater.

12.5. Results of PBT and vPvB assessment

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

Not Classified as PBT/vPvB by current EU criteria.

ISOPROPANOL (CAS: 67-63-0)

Not Classified as PBT/vPvB by current EU criteria.

Methyl Ethyl Ketone (CAS: 78-93-3)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Ecological information on ingredients.

ETHANOL (CAS: 64-17-5)

The product contains volatile, organic compounds which have a photochemical ozone creation potential.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste material should not be disposed of directly to drain. Avoid unauthorised disposal. Do not dump illegally onto land or into water. Dispose of waste and residues in accordance with local authority requirements. The recommended method for treatment of waste residues is either reclaimation or incineration by specialist disposal company. Recover and reclaim or recycle, if practical. When dealing with waste always consider the waste management hierarchy of Prevention, Preparation for re-use, Recycling, Recovery and Disposal. It is advisable to minimise waste at source if possible, then re-use, recover or recycle wherever possible before considering waste disposal options.

Waste Class

070104* Other organic solvents, washing liquids and mother liquors

SECTION 14: TRANSPORT INFORMATION

General	LIMITED QUANITY SIZE 1 LITRE

14.1. UN number

UN No. (ADR/RID/ADN)	1170
UN No. (IMDG)	1170
UN No. (ICAO)	1170

14.2. UN proper shipping name

Proper Shipping Name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)

14.3. Transport hazard class(es)

IMDG Class	3

Transport Labels

14.4. Packing group

ADR/RID/ADN Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS	F-E S-D
Emergency Action Code	2YE
Tunnel Restriction Code	(D/E)

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

SECTION 15: REGULATORY INFORMATION

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

Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Highly Flammable Liquid Regulations 1972. Fire precautions Act 1971. Health and Safety at Work Act 1974. Chemicals (Hazard Information & Packaging) Regulations.

EU Legislation

Dangerous Preparations Directive 1999/45/EC. 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. This product complies with the formulation as laid down in the Denatured Alcohole Regulations 2013.

National Regulations

Health and Safety at Work Act (As Amended) 1974 The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007). 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

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Training Advice

The information on directions for use can be found on the product label. It is important to ensure that anyone using this product in the workplace has been adequately trained and in particular: The use of personal protective equipment. methods of cleaning up and disposal of waste. The basic first aid arrangements.

Revision Date	03/02/2015
Revision	6
Supersedes date	11/07/2014

Risk Phrases In Full

R22	Harmful if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.
H335	May cause respiratory irritation.
EUH066	Repeated exposure may cause skin dryness or cracking.