



ESS eSDS™ Services ESS eSDS™ Cover Sheet

TO:	Greenergy
DATE:	08 Oct 10 15:15

SDS DETAILS	
CAS:	64-17-5
SUBSTANCE:	Ethanol
SDS LANGUAGE:	English
NOTES:	

DEAL DETAILS	
INCOMING REF NO:	
VESSEL / BARGE:	
LOCATION:	United Kingdom
ESTIMATED ARRIVAL DATE:	
APPROXIMATE TONNAGE:	
ADDITIONAL INFORMATION:	



SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING	
Commercial Product Name	Bioethanol
Use of the substance/preparation	Component for blending into transport fuels
Company	Greenergy Fuels Limited
	198
	High Holborn
	London
	WC1V 7BD
	United Kingdom
Telephone number	02074047700
Email	msds-info@greenergy .com
Fax	
Emergency telephone number	02074047700

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F : Highly flammable

2. HAZARDS IDENTIFICATION

Most important hazards : The product is classified as dangerous in accordance with Directive 67/548/EEC. Highly flammable.

Environmental properties : Not hazardous

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components	Value(s)	CAS No / EC No / EC Index	Symbol(s)	R-Phrase(s)
Substance name				
Ethanol	: 100 %	64-17-5 / 200-578-6 / 603-002-00-5	F	11
Full text of R-phrases	: See section 16.			

4. FIRST AID MEASURES

First aid measures

Inhalation : Keep at rest.
Move to fresh air.
Oxygen or artificial respiration if needed.

Skin contact : Wash off immediately with soap and plenty of water.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion : Rinse mouth.
Drink plenty of water.

Additional advice : Consult a physician if necessary
Never give anything by mouth to an unconscious person.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Fire Hazard : Highly flammable.

Suitable extinguishing media : Use dry chemical, CO₂, water spray or alcohol-resistant foam

Extinguishing media which must not be used for safety reason : High volume water jet

Specific hazards : Evacuate personnel to safe areas.
Vapours may form explosive mixture with air.
Vapours are heavier than air and may spread along floors.
The pressure in sealed containers can increase under the influence of heat.
Flash back possible over considerable distance.
Burning produces obnoxious and toxic fumes.
Cool containers / tanks with spray water.
Possible decomposition products are: CO_x
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for : Wear personal protective equipment.

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5. FIRE-FIGHTING MEASURES (continued)

firefighters : Wear self-contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : See also section 8.
Wear personal protective equipment.
Do not breathe vapours or spray mist.
Ensure adequate ventilation
Avoid contact with skin, eyes and clothing.
Do not smoke.
Keep away from open flames, hot surfaces and sources of ignition.
Ensure all equipment is electrically grounded before beginning transfer operations.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods for cleaning up : Remove all sources of ignition.
Do not use tools which may produce sparks.
Prevent further leakage or spillage if safe to do so.
Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up and shovel into suitable containers for disposal.
After cleaning, flush away traces with water.
Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Storage : Keep tightly closed in a dry, cool and well-ventilated place.
Store in original container.
Keep away from open flames, hot surfaces and sources of ignition.
Keep away from direct sunlight.
Do not store near or with any of the incompatible materials listed in section 10.

Handling : See also section 8.
Wear personal protective equipment.
Handle in accordance with good industrial hygiene and safety practice.
Do not breathe vapours or spray mist.
Ensure adequate ventilation
Avoid contact with skin, eyes and clothing.
Wash hands before breaks and immediately after handling the product.
Keep away from open flames, hot surfaces and sources of ignition.
Do not smoke.
Do not breathe vapours or spray mist.
Always replace cap after use.
Do not burn, or use a cutting torch on, the empty drum.
Do not puncture or incinerate.
Ensure all equipment is electrically grounded before beginning transfer operations.

Specific use(s) : Industrial

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection : Ensure adequate ventilation
Not required under normal use
In case of insufficient ventilation wear suitable respiratory equipment. (type A)

Hand protection : Nitrile rubber - Butylrubber (EN 374)
The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION (continued)

	requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the gloves supplier.
Eye protection	: Safety glasses (EN166)
Hygiene measures	: Use only in area provided with appropriate exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product.
Exposure limit(s)	: Ethanol : TLV-TWA (mg/m ³) : 260 (the Netherlands); 950 (Norway); 960 (Germany, Suisse); 1000 (Sweden, Czech Republic, Estonia, Lithuania, Bulgaria); 1900 (Denmark, France, Finland, Greece, Austria, Hungary, Slovenia, Croatia); 1907 (Belgium); 1910 (Spain); 1920 (United Kingdom); 1000 ppm (Portugal) Ethanol : TLV-STEL (mg/m ³) : 1900 (the Netherlands, Lithuania, Estonia); 1920 (Suisse); 2500 (Finland); 3000 (Czech Republic); 3800 (Austria); 7600 (Hungary); 9500 (France)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Colour	: Colourless
Odour	: Alcoholic
pH	: No data available
Melting point/range	: -114°C
Boiling point/range	: 78°C
Flash point	: 12°C
Autoignition temperature	: ca 425°C
Explosive properties	: LEL: 3,4% UEL: 15,0%
Oxidising properties	: Not applicable
Vapour pressure	: ca 57,3 hPa @ 20°C
Partition coefficient (n-octanol/water)	: ca -0,32
Viscosity	: No data available
Water solubility	: Miscible
Vapour density	: 1,59
Evaporation rate	: 3,4
Density	: 0,79

10. STABILITY AND REACTIVITY

Stability	: Stable at normal conditions.
Hazardous decomposition products	: Burning produces obnoxious and toxic fumes. Possible decomposition products are: COx
Materials to avoid	: Oxidizing agent , acids and bases
Conditions to avoid	: Keep away from heat and sources of ignition. Exposure to sunlight.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	: • Ethanol : LD50/oral/rat : 1501 mg/kg • Ethanol : LC50/inhalation/4h/rat : 124,7 mg/l
Inhalation	: Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Skin contact	: Prolonged skin contact may cause skin irritation and/or dermatitis.

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11. TOXICOLOGICAL INFORMATION (continued)

Eye contact : May be irritating.
 Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
 Chronic toxicity : No adverse effects are expected.

12. ECOLOGICAL INFORMATION

Persistence and degradability : Readily biodegradable
 Mobility : Miscible
 Ecotoxicity effects : • Ethanol : LC50/96h/fish : 14200 mg/l (Pimephales promelas), 10000 - 11500mg/l (Alburnus alburnus)
 • Ethanol : LC50/48h/daphnia : 9268 - 14221 mg/l (Daphnia magna)
 Not hazardous
 Bioaccumulation : log Pow = -0,32
 Does not bioaccumulate

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products : Dispose of in accordance with local regulations.
 Do not burn, or use a cutting torch on, the empty drum.
 Do not puncture or incinerate.
 Codes of waste (2001/573/EC, 75/442/EEC, 91/689/EEC) : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
 The following Waste Codes are only suggestions:
 07 01 04* - other organic solvents, washing liquids and mother liquors
 15 01 10* - packaging containing residues of or contaminated by dangerous substances

14. TRANSPORT INFORMATION

Class



ADR/RID
 UN-No : 1170
 Proper shipping name : ETHANOL (ETHYL ALCOHOL)
 Class : 3
 Packing group : II
 IMDG
 UN-No : 1170
 Class : 3
 Packing group : II
 Proper shipping name : ETHANOL (ETHYL ALCOHOL)
 EmS : F-D, S-U
 ICAO/IATA
 UN-No : 1170
 Class : 3
 Packing group : II
 Proper shipping name : ETHANOL (ETHYL ALCOHOL)

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15. REGULATORY INFORMATION

Symbol(s) : F - Highly flammable
 R-phrase(s) : R11 - Highly flammable.
 S-phrase(s) : S 2 - Keep out of the reach of children.
 S 7 - Keep container tightly closed.
 S16 - Keep away from sources of ignition - No smoking.
 Labelling : The product is classified as dangerous in accordance with Directive 67/548/EEC.
 EINECS : 200-578-6
 WGK : 1

16. OTHER INFORMATION

Sources of key data used to compile the : European Chemicals Bureau
 datasheet
 Text of R phrases mentioned in Section : R11 - Highly flammable.
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The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 1967/548/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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