

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Material Name:	Ethanol E85
REACH Registration No.:	
Synonyms:	Ethanol fuel, ethanol and gasoline mixture

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

Product Use: Fuel for flexible fuel vehicles that can run on any mixture of ethanol and gasoline.
Distribution of substance, industrial (Gasoline)
Formulation & (re)packing of substances and mixtures, industrial (Gasoline)
Use as a fuel, industrial (Gasoline)
Use as a fuel, professional (Gasoline)
Use as a fuel, consumer (Gasoline)
Distribution of substance, industrial (Ethanol)
Formulation & (re)packing of substances and mixtures, industrial (Ethanol)
Use as a fuel, industrial (Ethanol)
Use as a fuel, professional (Ethanol)
Use as a fuel, consumer (Ethanol)

Uses Advised Against: Applications that are not registered and risk assessed.

1.3 Details of the supplier of the substance or mixture

Manufacturer/Supplier: St1 Refinery AB
Box 8889
402 72 Göteborg, Sweden

Telephone: +46 (0) 31 744 6000

Email Contact for MSDS: bransle@st1.se or Supply-Sweden@st1.se

1.4 Emergency Telephone Number: 112 SOS Alarm, Swedish Poisons Information Centre:
+46 (0)8 331231

Safety Data Sheet

2. HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition : Mixture

(EG) No 1272/2008 (CLP)	
Hazard class	Category codes
Flammable liquid, 2	H225
Acute toxicity, 1	H304
Skin irritation, 2	H315
Eye Irrit, 2	H319
Germ cell mutagenicity, 1B	H340
Carcinogenicity, 1B	H350
Repr, 2	H361
STOT – SE, 3	H336
Aquatic Chronic, 2	H411

2.2 Label Elements

Labelling according to Regulation (EG) no. 1272/2008

Hazard pictograms:



Signal word: DANGER

Hazard statements:

PHYSICAL HAZARDS

H225: Highly flammable liquid and vapour.

HEALTH HAZARDS

H304: May be fatal if swallowed and enters airways

H315: Causes skin irritation

H319: Causes serious eye irritation

H340: May cause genetic defects

H350: May cause cancer

H361: Suspected of damaging fertility or the unborn child

H336: May cause drowsiness or dizziness

ENVIRONMENTAL HAZARDS

H411: Toxic to aquatic life with long lasting effects

Safety Data Sheet

Precautionary statements:

PREVENTION

P201, P202, P210, P233, P240, P241, P242, P243, P261, P264, P271, P273, P280

RESPONSE

P301+P310, P302+P352, P303+P361+P353
P304+P340, P305+P351+P338, P308+P313, P331, P332+P313,
P337+P313, P362+P364, P370+P378, P391

STORAGE

P403+P235, P405

DISPOSAL

P501

For more information regarding CLP precautionary statements see chapter 16.

2.3 Other Hazards

Health Hazards:

Slightly irritating to respiratory system.

A component or components of this material may cause cancer. This product contains benzene which may cause leukaemia (AML acute myelogenous leukaemia). May cause MDS (Myelodysplastic Syndrome).

Safety Hazards:

Electrostatic charges may be generated during handling.

Electrostatic discharge may cause fire. Liquid evaporates quickly and can ignite leading to a flash fire, or an explosion in a confined space.

The substance does not fulfil all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Other information:

This product is intended for use in closed systems only.

Safety Data Sheet

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

3.2 Mixtures

Preparation Description : A complex combination of hydrocarbons consisting of paraffin's, cycloparaffin's, aromatic and olefinic hydrocarbons (including benzene in a maximum of 1.0% vol) with carbon numbers predominantly in the range of C4 to C12. Contains oxygen-containing hydrocarbons which may consist of methyl tertiary butyl ether (MTBE) and other ethers. Contains oxygenated hydrocarbons, including ethanol and other alcohols. May also contain several additives at <0.1% vol. Product is a mixture according regulation 1907/2006/EC.

Classification of components according to (EG) nr 1272/2008

Chemical Name	CAS No.	EINECS	REACH Registration No.	Conc. vol %
Ethanol	64-17-5	200-578-6		75 - 85
Gasoline, low boiling naphtha	86290-81-5	289-220-8	01-2119471335-39	15 - 25
MTBE (methyl tert-butyl ether)	1634-04-4	216-653-1		0 - 5
Toluene	108-88-3	203-625-9		<10
n-hexan	110-54-3	203-777-6		<5
Benzene	71-43-2	200-753-7		<1

Chemical Name	Hazard class	Category codes
Etanol	Flam. Liq, 2; Eye Corr, 2	H225; H319
Bensin, nafta med låg kokpunkt	Flam. Liq, 1; Asp. Tox, 1; Skin Corr, 2; Muta, 1B; Carc, 1B; Repr, 2; STOT SE, 3; Aq. Chronic, 2	H224; H304; H315; H340; H350; H361; H336; H411
MTBE (metyl-tert-butyleter)	Flam. Liq, 2; Skin Corr, 2	H225; H315
Toluen	Flam. Liq, 2; Asp. Tox, 1; Skin Corr, 2; Repr, 2; STOT RE, 2; STOT SE, 3	H225; H304; H315; H361; H373; H336
n-Hexan	Flam. Liq, 2; Asp. Tox,1; Skin Corr, 2; Repr, 2; STOT RE, 2; STOT se, 3; Aq. Chronic, 2	H225; H304; H315; H361; H373; H336; H411
Bensen	Flam. Liq, 2; Asp. Tox,1; Skin Corr, 2; Eye Corr, 2; Muta, 1B; Carc, 1B; STOT RE, 1	H225; H304; H315; H319; H340; H350; H372

Safety Data Sheet

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

- Inhalation:** Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
- Skin contact:** Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment.
- Eye contact:** Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persists, transport to the nearest medical facility for additional treatment.
- Ingestion:** If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 38,3 °C, shortness of breath, chest congestion or continued coughing or wheezing.

- 4.2 Most important symptoms/effects, acute & delayed:** Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Eye irritation signs and symptoms may include a burning sensation and a temporary redness of the eye. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Auditory system effects may include temporary hearing loss and/or ringing in the ears.

- 4.3 Indication of immediate medical attention and special treatment needed:** Treat symptomatically.
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Safety Data Sheet

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

5.1 Extinguishing Media: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2 Special hazards arising from substance or mixture: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water

5.3 Advice for fire-fighters: Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

Additional Advice: If the fire cannot be extinguished the only course of action is to evacuate immediately. Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

6.1.1 For non-emergency personnel: Avoid contact with skin, eyes and clothing. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly. Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet. If contamination of sites occurs remediation may require specialist advice. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Take precautionary measures against static discharges.

6.1.2 For emergency personnel: is both above and below the ground surface. Underground services

Safety Data Sheet

(drains, pipelines, cable ducts) can provide preferential flow paths. Do not breathe fumes, vapour. Take measures to minimise the effects on groundwater. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area and evacuate all personnel. Attempt to disperse the gas or to direct its flow to a safe location For example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

6.2 Environmental Precautions:

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

6.3 Methods and Material for Containment

Use mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

Additional Advice:

Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained. Maritime spillages should be dealt with using a Shipboard Oil Pollution Emergency Plan (SOPEP), as required by MARPOL Annex II.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Prevent spillages. For comprehensive advice on handling, product transfer, storage and tank cleaning refer to the product supplier. Do not use as a cleaning solvent or other non-motor fuel uses.

Safety Data Sheet

When using do not eat or drink. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Never siphon by mouth. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Avoid exposure

7.2 Conditions for safe storage, including any incompatibilities:

Tank storage: Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded). Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.

7.3 Specific End Uses:

Please refer to Ch16 and/or the annexes for the registered uses under REACH.

Additional Information:

Ensure that all local regulations regarding handling and storage facilities are followed. Exposure to this product should be reduced as low as reasonably practicable.

Product Transfer:

Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes.

Recommended Materials:

For containers, or container linings use mild steel, stainless steel. Examples of suitable materials are: high density polyethylene (HDPE), polypropylene (PP), and Viton (FKM), which have been specifically tested for compatibility with this product. For container linings, use amine-adduct cured epoxy paint. For seals and gaskets use: graphite, PTFE, Viton A, Viton B.

Unsuitable Materials:

Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber

Safety Data Sheet

(NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), and polyisobutylene. However, some may be suitable for glove materials.

Container Advice: Do not cut, drill, grind, weld or perform similar operations on or near containers. Containers, even those that have been emptied, can contain explosive vapours. Keep only in original container. Keep container tightly closed. Keep containers closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Occupational Exposure Limits (OEL)

Chemical name	Source	Limit level mg/m ³	Limit level ppm	Short-time value mg/m ³	Short-time value ppm	Notation
Gasoline, low boiling point naphtha	AFS 2005:17	250				
Ethanol	AFS 2005:17	1000	500	1900	1000	
MTBE (methyl tert-butyl ether)	AFS 2005:17	110	30	220	60	
Toluene	AFS 2005:17	200	50	400	100	Can be absorbed through the skin
n-hexan	AFS 2005:17	90	25	180	50	
Benzene	AFS 2005:17	1,5	0,5	9	3	Can be absorbed through the skin

AFS: Swedish Work Environment Authority

Limit level: Occupational exposure limit for exposure during a working day (8 hours).

Short-time value: A recommended value which consists of a time-weighted average for exposure over a period of 15 minutes.

8.2 Exposure Controls
General Information: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Eye washes and showers for emergency use.

Safety Data Sheet

Occupational Exposure Controls

Personal Protective Equipment:	Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
Eye Protection:	Chemical splash goggles (chemical monogoggles). Approved to EU Standard EN166.
Hand Protection:	Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Select gloves tested to a relevant standard (e.g. Europe EN374). When prolonged or frequent repeated contact occurs, Nitrile gloves may be suitable. (Breakthrough time of > 240 minutes.) For incidental contact/splash protection Neoprene, PVC gloves may be suitable.
Body protection:	Chemical resistant gloves/gauntlets, boots, and apron (where risk of splashing).
Respiratory Protection:	If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours (boiling point >65 °C) meeting EN14387. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus. All respiratory protection equipment and use must be in accordance with local regulations.
Monitoring Methods:	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Thermal Hazards :	Not applicable.
Monitoring Methods :	Monitoring of the concentration of substances in the breathing

Safety Data Sheet

zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Environmental Exposure Controls

Environmental exposure control measures: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

Consumer Exposure Controls

Exposure Control Measures for Consumers : Do not ingest. If swallowed then seek immediate medical assistance.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Red liquid
Odour:	Hydrocarbon
Odour threshold:	-
pH:	Not applicable
Melting point/freezing point:	< -40 °C
Initial boiling point and boiling range:	35 - 205°C
Flash point:	< 0 °C
Evaporation rate:	-
Flammability (solid, gas)	-
Upper/lower flammability or explosive limits:	3 - 9 % (V)
Vapour pressure, at 37,8 °C:	35 - 95 kPa
Vapour density:	-
Relative density:	765 - 785 kg/m ³
Solubility(ies):	Partially soluble
Partition coefficient: n-octanol/water:	-
Auto-ignition temperature:	> 300°C
Decomposition temperature:	-
Kinematics Viscosity, 40°C	< 1 mm ² /s
Explosive properties:	Not considered to be explosive
Oxidising properties:	-

9.2 Other Information : Not applicable.

Safety Data Sheet

10. STABILITY AND REACTIVITY

10.1 Reactivity:	May oxidise in the presence of air.
10.2 Chemical Stability:	Stable under normal conditions of use.
10.3 Possibility of Hazardous Reactions:	May oxidise in the presence of air.
10.4 Conditions to Avoid:	Avoid heat, sparks, open flames and other ignition sources.
10.5 Incompatible Materials:	Strong oxidising agents.
10.6 Hazardous Decomposition Product:	Hazardous decomposition products are not expected to form during normal storage. Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXIKOLOGISK INFORMATION

11.1 Information on Toxicological effects

Basis for Assessment:	Information given is based on product data, knowledge of the components and the toxicology of similar products.
Likely Routes of Exposure:	Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.
Acute Oral Toxicity:	Low toxicity: LD50 >2000 mg/kg, Rat
Acute Dermal Toxicity:	Low toxicity: LD50 >2000 mg/kg, Rabbit.
Acute Inhalation Toxicity:	Low toxicity: LC50 >5 mg/l/4 h, Rat.
Skin Corrosion/Irritation:	Irritating to skin.
Serious Eye Damage/Irritation:	Expected to be slightly irritating.
Respiratory Irritation:	Based on human experience, breathing of vapours or mists may cause a temporary burning sensation to nose, throat and lungs.
Respiratory or Skin Sensitisation:	Not expected to be a sensitizer.
Aspiration Hazard:	Aspirated or vomited may cause chemical pneumonitis which can be fatal.
Germ Cell Mutagenicity:	May cause heritable genetic.

Safety Data Sheet

Carcinogenicity:	May cause cancer. The risk of cancer due to exposure length and extent.
Reproductive and Developmental Toxicity:	Causes birth defects at doses which are maternally toxic. Many case studies involving abuse during pregnancy indicate that toluene can cause birth defects, growth retardation and learning disabilities (Toluene).
Specific target organ toxicity - single exposure:	High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Specific target organ toxicity - repeated exposure:	Many case studies involving abuse during pregnancy indicate that toluene can cause birth defects, growth retardation and learning disabilities. Ethanol, one of the material components, can cause birth defects and / or miscarriages at high oral doses.
Additional Information :	Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest. Solvent abuse and noise interaction in the work environment may cause hearing loss (Toluene). Abuse of vapours has been associated with organ damage and death (Toluene). May cause MDS (Myelodysplastic Syndrome) (Benzene).

12. ECOLOGICAL INFORMATION

Basis for Assessment:	Incomplete ecotoxicological data are available for this product. The information given below is based partly on knowledge of the components and the ecotoxicology of similar products.
12.1 Toxicity	
Acute Toxicity:	Expected to be toxic: (to aquatic organisms) LL/EL/IL50 1 - 10 mg/l (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).
Fish:	Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l
Aquatic Invertebrates:	Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l
Algae:	Expected to be toxic: LL/EL/IL50 > 1 <= 10 mg/l
Microorganisms:	Expected to be harmful: LL/EL/IL50 >10 <= 100 mg/l
Chronic Toxicity	NOEC/NOEL expected to be > 1.0 - <= 10 mg/l (based on test

Safety Data Sheet

Fish :	data)
Aquatic Invertebrates :	NOEC/NOEL expected to be > 1.0 - <= 10 mg/l (based on test data)
12.2 Persistence and degradability:	Major constituents are expected to be inherently biodegradable, but the product contain components that may persist in the environment. the volatile constituents will oxidize rapidly by photochemical reactions in air.
12.3 Bioaccumulative Potential:	Contains constituents with the potential to bioaccumulate.
12.4 Mobility:	Floats on water. Evaporates within a day from water or surface. Large volumes may penetrate soil and contaminate groundwater. It contains volatile components.
12.5 Results of PBT and vPvB assessment:	The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.
12.6 Other adverse effects:	High oxygen consumption during the degradation creates the risk of lack of oxygen at higher emissions in smaller lakes and rivers.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Material Disposal:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose into the environment, in drains or in water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.
Container Disposal:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer. Do not pollute the soil, water or environment with the waste container.
Local Legislation:	Proposals for waste code under the EU Waste Disposal Code (EWC):

Safety Data Sheet

13 07 02* Gasoline
13 07 03* Other fuels (including mixtures)
The number given to waste is associated with proper use. Users must decide if their particular use results in another waste assigned. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

ADR/RID

UN No:	3475
UN Proper Shipping Name:	ETHANOL AND GASOLINE MIXTURE
Transport Hazard Class:	3
Packing group:	II
Danger label (primary risk):	3
Hazard identification No:	33
Classification code:	F1

Land transport

ADN

UN No:	3475
UN Proper Shipping Name:	ETHANOL AND GASOLINE MIXTURE
Transport Hazard Class:	3
Packing group:	II
Environmental Hazard:	Yes

Inland waterways transport

IMDG

UN No:	3475
UN Proper Shipping Name:	ETHANOL AND GASOLINE MIXTURE
Transport Hazard Class:	3
Packing group:	II
Marine pollutant:	No

Sea transport

IATA

UN No:	3475
UN Proper Shipping Name:	ETHANOL AND GASOLINE MIXTURE
Transport Hazard Class:	3
Packing group:	II
Environmental Hazard:	Yes

Air transport

Additional information: MARPOL Annex II rules apply for bulk shipments by sea.

Safety Data Sheet

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

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

EU Regulation (EC) No 1907/2006 (REACH).
EU Regulation (EC) No 1272/2008 Classification, labelling and packaging of chemical substances and mixtures (CLP).

15.2 Chemical Safety Assessment

A Chemical Safety Assessment was performed for this substance.

16. OTHER INFORMATION

Hazard statement:

H225: Highly flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways
H315: Causes skin irritation
H319: Causes serious eye irritation
H340: May cause genetic defects
H350: May cause cancer
H361: Suspected of damaging fertility or the unborn child
H336: May cause drowsiness or dizziness
H411: Toxic to aquatic life with long lasting effects

Precautionary statements:

P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P210: Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233: Keep container tightly closed
P240: Ground/bond container and receiving equipment
P241: Use explosion-proof electrical/ventilation/ lightning equipment
P242: Use only non-sparing tools
P243: Take precautionary measures against static discharge
P261: Do not breath fume/gas/mist/vapours/spray
P264: Wash hands thoroughly after handling
P271: Use only outdoors or in a well-ventilated area
P273: Avoid release to the environment
P280: Wear protective gloves/clothing/eye protection
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352: IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

Safety Data Sheet

water/shower

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice/attention

P331: Do NOT induce vomiting

P332+P313: If skin irritation occurs: Get medical advice/attention

P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothes and wash before reuse.

P370+P378: In case of fire: Use water spray or foam for extinction.

P391: Collect spillage

P403+P235: Store in a well-ventilated place. Keep cool

P405: Store locked up

P501: Dispose of contents/container in accordance with local/regional/national/international regulation

Recommended Restrictions on Use (Advice Against):

This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.

Additional Information:

This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

Further Information

This product is intended for use in closed systems only.

MSDS Distribution:

The information in this document should be made available to all who may handle the product.

MSDS Version Number:

2.4

MSDS Effective Date:

29.01.2016

MSDS Regulation Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.