



# Safety Data Sheet

## Ethanol 95 E5

Version 2.01

Revision Date 09.03.2018

### SECTION 1. Identification of the substance/mixture and of the company/undertaking

#### Product identifier

Trade name Ethanol 95 E5

Product code 1806

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

Use Solvent. Raw material for printing inks and printing ink additives.

#### Manufacturer or supplier's details

Company Sasol Chemicals, a division of Sasol South Africa (Pty) Ltd

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### SECTION 2. Hazards identification

#### Classification of the substance or mixture

South Africa. GHS Classification and Labelling of Chemicals - SANS 10234

##### Classification

Flammable liquids	Category 2
Eye irritation	Category 2
Specific target organ toxicity - single exposure	Category 3

#### Label elements

##### Pictogram



##### Signal word

Danger

##### Hazard statements

H225: Highly flammable liquid and vapour.  
 H319: Causes serious eye irritation.  
 H336: May cause drowsiness or dizziness.

#### Precautionary statements

##### Prevention

P210: Keep away from open flames/hot surfaces. - No smoking.  
 P240: Ground/bond container and receiving equipment.  
 P241: Use explosion-proof electrical/ ventilating/ lighting equipment.  
 P242: Use only non-sparking tools.  
 P243: Take precautionary measures against static discharge.



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	<p>P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P264: Wash skin thoroughly after handling.</p> <p>P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p>
<b>Response</b>	<p>P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.</p> <p>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P337 + P313: If eye irritation persists: Get medical advice/ attention.</p> <p>P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P312: Call a POISON CENTER/doctor if you feel unwell.</p>
<b>Storage</b>	<p>P403 + P233 + P235: Store in a well-ventilated place. Keep container tightly closed. Keep cool.</p> <p>P405: Store locked up.</p>
<b>Disposal</b>	<p>Dispose of as hazardous waste in compliance with local and national regulations.</p>
<b>Other hazards</b>	<p>No data available</p>

### SECTION 3. Composition/information on ingredients

#### Mixture

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### Ethanol

**Contents:** >= 95.00 %W/W

**CAS-No.** 64-17-5

**Index-No.** 603-002-00-5

**EC-No.** 200-578-6

**Hazard statements** *H225 H319*

### Ethyl acetate

**Contents:** >= 5.00 %W/W

**CAS-No.** 141-78-6

**Index-No.** 607-022-00-5

**EC-No.** 205-500-4

**Hazard statements** *H225 H319 H336*

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4. First aid measures

### Description of necessary first-aid measures

<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician immediately.

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### Most important symptoms/effects, acute and delayed

Refer to SECTION 11

## SECTION 5. Firefighting measures

<b>Suitable extinguishing media</b>	Water spray. Dry powder. Foam.
<b>Unsuitable extinguishing media</b>	Water spray jet.
<b>Special hazards arising from the substance or mixture</b>	Flash back possible over considerable distance. Do not allow run-off from fire fighting to enter drains or water courses.
<b>Special protective equipment for firefighters</b>	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

## SECTION 6. Accidental release measures

<b>Personal precautions</b>	Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.
<b>Environmental precautions</b>	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material and dispose of as hazardous waste.
<b>Reference to other sections</b>	Refer to Section 8 and 13

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### SECTION 7. Handling and storage

- Safe handling advice** Do not breathe vapours or spray mist. Wear personal protective equipment.
- Advice on protection against fire and explosion** Keep away from open flames, hot surfaces and sources of ignition. Use explosion-proof equipment.
- Requirements for storage areas and containers** Keep containers tightly closed in a cool, well-ventilated place.
- Advice on common storage** No data available

### SECTION 8. Exposure controls/personal protection

#### Components with workplace control parameters

#### NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
ETHYL ALCOHOL	TWA	1,900 mg/m <sup>3</sup>	1995	South Africa RELs
ETHANOL	TWA	1,000 ppm	1995	South Africa RELs
ETHYL ACETATE	TWA	1,400 mg/m <sup>3</sup>	1995	South Africa RELs
	TWA	400 ppm	1995	South Africa RELs

#### Exposure controls

##### Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

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### Personal protective equipment

<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Hand protection</b>	Gloves suitable for permanent contact: Material: butyl-rubber Break through time: 4 h Material thickness: 0.5 mm
<b>Eye protection</b>	Safety glasses with side-shields
<b>Skin and body protection</b>	Safety shoes. Protective suit
<b>Hygiene measures</b>	Wash hands before breaks and immediately after handling the product.

## SECTION 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Form</b>	Liquid
<b>State of matter</b>	Liquid; at 20 ° C; 1,013 hPa
<b>Colour</b>	Colourless
<b>Odour</b>	Alcohol-like
<b>Odour Threshold</b>	No data available
<b>pH</b>	Neutral
<b>Melting point/range</b>	-83.6 ° C

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<b>Boiling point/boiling range</b>	77 ° C
<b>Flash point</b>	13 ° C; closed cup
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Auto-ignition temperature</b>	363 ° C
<b>Lower explosion limit</b>	3.3 %(V)
<b>Upper explosion limit</b>	19 %(V)
<b>Relative vapour density</b>	3.04
<b>Density</b>	0.79 g/cm <sup>3</sup> ; 20 ° C
<b>Water solubility</b>	Completely miscible, Completely soluble
<b>Viscosity, dynamic</b>	1.41 mPa.s

### SECTION 10. Stability and reactivity

<b>Reactivity</b>	Stable under recommended storage conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Heating can release hazardous gases.
<b>Conditions to avoid</b>	Heat, flames and sparks. Extremes of temperature and direct sunlight.
<b>Materials to avoid</b>	Oxidizing agents. Acids and bases
<b>Hazardous decomposition products</b>	Carbon oxides.

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## SECTION 11. Toxicological information

<b>Acute oral toxicity</b>	Ethanol: LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 401; GLP: no (literature value)
<b>Acute oral toxicity</b>	Ethyl acetate: LD50 Rat: 2,000 mg/kg; (literature value)
<b>Acute inhalation toxicity</b>	Ethanol: LC50 Mouse: 4 h; > 20 mg/l; (literature value)
<b>Acute dermal toxicity</b>	Ethanol: LD50 Dermal Rabbit: > 2,000 mg/kg; OECD Test Guideline 402; (literature value)
<b>Skin irritation</b>	Ethanol: Rabbit: Not irritating; OECD Test Guideline 404 (literature value)
<b>Skin irritation</b>	Ethyl acetate: Rabbit: Not irritating; (literature value)
<b>Eye irritation</b>	Ethanol: Rabbit: irritating OECD Test Guideline 405 (literature value)
<b>Eye irritation</b>	Ethyl acetate: Rabbit: Slightly irritating (literature value)
<b>Sensitisation</b>	Ethanol: Maximisation Test; Guinea pig: Not sensitizing; OECD Test Guideline 406; (literature value)
<b>Sensitisation</b>	Ethyl acetate: Maximisation Test; Guinea pig: Not sensitizing; OECD Test

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<b>Mutagenicity</b>	<p>Guideline 406;</p> <p>Ethanol:</p> <p>Ames test: Salmonella typhimurium; with and without; Not mutagenic; OECD Test Guideline 471; (literature value)</p>
<b>Mutagenicity</b>	<p>Ethyl acetate:</p> <p>Ames test: Salmonella typhimurium; Not mutagenic; (literature value)</p>

### SECTION 12. Ecological information

<b>Toxicity to fish</b>	<p>Ethanol:</p> <p>static test; Leuciscus idus; 48 h; LC50; &gt; 100 mg/l; OECD Test Guideline 203; (literature value)</p>
<b>Toxicity to fish</b>	<p>Ethyl acetate:</p> <p>semi-static test; Salmo gairdneri; 96 h; &gt; 100 mg/l; OECD Test Guideline 203; (literature value)</p>
<b>Toxicity to daphnia and other aquatic invertebrates</b>	<p>Ethanol:</p> <p>static test; Daphnia magna (Water flea); 24 h; EC50; &gt; 100 mg/l(literature value)</p>
<b>Toxicity to daphnia and other aquatic invertebrates</b>	<p>Ethyl acetate:</p> <p>static test; Daphnia magna (Water flea); 48 h; EC50; &gt; 100 mg/l(literature value)</p>
<b>Toxicity to algae</b>	<p>Ethanol:</p> <p>static test; Chlorella pyrenoidosa EC50; &gt; 100 mg/l; OECD Test</p>

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	Guideline 201; (literature value)
<b>Toxicity to algae</b>	Ethyl acetate: static test; Desmodium subspicatus (green algae)72 h; EC50; > 100 mg/l; (literature value)
<b>Toxicity to bacteria</b>	Ethanol: Pseudomonas putida; 16 h; 6,500 mg/l; Toxicity to bacteria
<b>Biodegradability</b>	Ethanol: aerobic; > 70 %; 5 d; Readily biodegradable.; OECD Guideline 301 D; (literature value)
<b>Biodegradability</b>	Ethyl acetate: aerobic; > 70 %; 28 d; Readily biodegradable.; OECD Guideline 301 D; (literature value)
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
<b>Chemical Oxygen Demand (COD)</b>	Ethanol: ca.1,700 mg/g; Directive 84/449/EEC, C.9; GLP: no;

### SECTION 13. Disposal considerations

<b>Product</b>	Disposal should be in accordance with local, regional and national legislations.
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### SECTION 14. Transport information



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### ADR

**UN number:** 1170  
**Class:** 3  
**Packaging group:** II; F1;  
**Proper shipping name:** ETHANOL SOLUTION

### RID

**UN number:** 1170  
**Class:** 3  
**Packaging group:** II; F1  
**Proper shipping name:** ETHANOL SOLUTION

### ADNR

**UN number:** 1170  
**Class:** 3  
**Packaging group:** II; F1  
**Proper shipping name:** ETHANOL SOLUTION

### IMDG

**UN number:** 1170



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<b>Class:</b>	3
<b>EmS:</b>	F-E, S-D
<b>Packaging group:</b>	II
<b>Proper shipping name:</b>	ETHANOL SOLUTION
<b>Marine pollutant</b>	Not a Marine Pollutant
<b>ICAO/IATA</b>	
<b>UN number :</b>	1170
<b>Class:</b>	3
<b>Packaging group:</b>	II
<b>Proper shipping name:</b>	ETHANOL SOLUTION

### SECTION 15. Regulatory information

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

<b>USA TSCA Inventory</b>	All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)
<b>Canadian Domestic Substances List (DSL)</b>	All chemical constituents are listed in: Canadian Domestic Substances List (DSL) (See chapter 3)
<b>Australian Inv. of Chem. Substances (AICS)</b>	All chemical constituents are listed in: Australian Inv. of Chem. Substances (AICS) (See chapter 3)



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<b>New Zealand Inventory of Chemicals (NZIoC)</b>	All chemical constituents are listed in: New Zealand Inventory of Chemicals (NZIoC) (See chapter 3)
<b>Jap. Inv. of Exist. &amp; New Chemicals (ENCS)</b>	All chemical constituents are listed in: Jap. Inv. of Exist. & New Chemicals (ENCS) (See chapter 3)
<b>Japan. Industrial Safety &amp; Health Law (ISHL)</b>	All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)
<b>Korea. Existing Chemicals Inventory (KECI)</b>	All chemical constituents are listed in: Korea. Existing Chemicals Inventory (KECI) (See chapter 3)
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>	All chemical constituents are listed in: Philippines Inventory of Chemicals and Chemical Substances (PICCS) (See chapter 3)
<b>China Inv. Existing Chemical Substances (IECSC)</b>	All chemical constituents are listed in: China Inv. Existing Chemical Substances (IECSC) (See chapter 3)

### SECTION 16. Other information

#### Full text of H-Statements

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.

All reasonable efforts were exercised to compile this SDS in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). The SDS only provides information regarding the health, safety and environmental hazards at the date of issue, to facilitate the safe receipt, use and handling of this product in the workplace and does not replace any product information or product specifications. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which this product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which this product will be received, handled or used in the workplace. The user, handler



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or receiver must ensure that the necessary mitigating measures are in place with respect to health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of this product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy of, or assume any liability for incomplete information contained herein or any advice given. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale.