



# Safety Data Sheet

## Ethanol 95 E5

Version 1.01

Revision Date 05.01.2021

### 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 Ltd  
**Address** Sasol Place, 50 Katherine Street  
Sandton  
2090  
South Africa  
**Telephone** +27103445000  
**E-mail address** sasolchem.info.sa@sasol.com  
**Emergency telephone number** +44 (0)1235 239 670 (Europe, Israel, Africa, Americas)  
+44(0)1235 239 671 (Middle East, Arabic African countries)  
+65 3158 1074 (Asia Pacific)  
+86 400 120 6011 (China)  
+27 (0)17 610 4444 (South Africa)  
0800 112 890 RSA-Local only  
+61 (2) 8014 4558 (Australia)

### SECTION 2. Hazards identification

#### Classification of the substance or mixture

**REGULATION (EC) No 1272/2008**

**Classification** Flammable liquids Category 2

#### Label elements

**REGULATION (EC) No 1272/2008**

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Hazard pictograms

:



Signal word

:

Danger

Hazard statements

:

H225 Highly flammable liquid and vapour.

### Precautionary statements

#### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

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.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

#### Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage

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

#### Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards

None known.

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### SECTION 3. Composition/information on ingredients

#### Mixture

##### Ethanol

**Contents:**  $\geq 95.00$  %W/W

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

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

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

**Hazard statements** *H225*

##### Ethyl acetate

**Contents:**  $\leq 5.00$  %W/W

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

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

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

**Hazard statements** *H225 H319 H336*

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### 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.  |

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

Refer to SECTION 11

### SECTION 5. Firefighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                          | Water spray, Foam, CO2, Dry powder.   |
| <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.<br>Use personal protective equipment.                      |

### SECTION 6. Accidental release measures

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

### 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



**SASOL**

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

### 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:<br>Material: butyl-rubber<br>Break through time: 4 h<br>Material thickness: 0.5 mm |
| <b>Eye protection</b>           | Safety glasses with side-shields  |
| <b>Skin and body protection</b> | Safety shoes or rubber boots. 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                       |
| <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 |

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|                             |                          |
|-----------------------------|--------------------------|
| <b>Water solubility</b>     | Completely soluble       |
| <b>Viscosity, dynamic</b>   | 1.41 mPa.s               |
| <b>Viscosity, kinematic</b> | 1.342 mm <sup>2</sup> /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.<br>Acids and bases                                  |
| <b>Hazardous decomposition products</b>   | Carbon oxides   |

### SECTION 11. Toxicological information

|                                  |   |
|----------------------------------|---|
| <b>Acute inhalation toxicity</b> | Ethanol:<br>LC50 Mouse: 4 h; vapour; > 20 mg/l; (literature value)                                      |
| <b>Skin irritation</b>           | Ethanol:<br>Rabbit: Not irritating; OECD Test Guideline 404 (literature value)                          |
| <b>Skin irritation</b>           | Ethyl acetate:<br>Rabbit: Not irritating; (literature value)  |
| <b>Eye irritation</b>            | Ethyl acetate:<br>Rabbit: Slightly irritating (literature value)  |
| <b>Sensitisation</b>             | Ethanol:<br>Maximisation Test; Guinea pig: Not sensitizing; OECD Test Guideline 406; (literature value) |
| <b>Sensitisation</b>             | Ethyl acetate:<br>Maximisation Test; Guinea pig: Not sensitizing; OECD Test Guideline 406;              |
| <b>Mutagenicity</b>              | Ethanol:<br>Ames test: Salmonella typhimurium; Not mutagenic; OECD                                      |

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Test Guideline 471; (literature value)

### Mutagenicity

Ethyl acetate:

Ames test: Salmonella typhimurium; Not mutagenic; (literature value)

## SECTION 12. Ecological information

### Toxicity to fish

Ethanol:

static test; Leuciscus idus; 48 h; LC50; > 100 mg/l; OECD Test Guideline 203; (literature value)

### Toxicity to fish

Ethyl acetate:

semi-static test; Salmo gairdneri; 96 h; > 100 mg/l; OECD Test Guideline 203; (literature value)

### Toxicity to daphnia and other aquatic invertebrates

Ethanol:

static test; Daphnia magna (Water flea); 24 h; EC50; > 100 mg/l(literature value)

### Toxicity to daphnia and other aquatic invertebrates

Ethyl acetate:

static test; Daphnia magna (Water flea); 48 h; EC50; > 100 mg/l(literature value)

### Toxicity to algae

Ethanol:

static test; Chlorella pyrenoidosa EC50; > 100 mg/l; OECD Test Guideline 201; (literature value)

### Toxicity to algae

Ethyl acetate:

static test; Desmodesmus subspicatus (green algae) 72 h; EC50; > 100 mg/l; (literature value)

### Toxicity to bacteria

Ethanol:

Pseudomonas putida; 16 h; 6,500 mg/l; Toxicity to bacteria

### Biodegradability

Ethanol:

aerobic; > 70 %; 5 d; Readily biodegradable.; OECD Guideline 301 D; (literature value)

### Biodegradability

Ethyl acetate:

aerobic; > 70 %; 28 d; Readily biodegradable.; OECD Guideline 301 D; (literature value)

### Mobility in soil

No data available

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**Results of PBT and vPvB assessment** 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).

**Chemical Oxygen Demand (COD)** Ethanol:  
ca. 1,700 mg/g; Directive 84/449/EEC, C.9; GLP: no;

**SECTION 13. Disposal considerations**

**Product** Disposal should be in accordance with local, regional and national legislations.

**Packaging** Dispose of spent product packaging responsibly and lawfully with due consideration for health, safety and the environment.

**SECTION 14. Transport information**

DG Pictogram



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

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

**ADNR**  
**UN number:** 1170

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|                              |                        |
|------------------------------|------------------------|
| <b>Class:</b>                | 3                      |
| <b>Packaging group:</b>      | II; F1                 |
| <b>Proper shipping name:</b> | ETHYL ALCOHOL SOLUTION |
| <b>IMDG</b>                  |                        |
| <b>UN number:</b>            | 1170                   |
| <b>Class:</b>                | 3                      |
| <b>EmS:</b>                  | F-E, S-D               |
| <b>Packaging group:</b>      | II                     |
| <b>Proper shipping name:</b> | ETHYL ALCOHOL 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> | ETHYL ALCOHOL 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<br>(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)   |
| <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) |



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|   |   |
|---|---|
| <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 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.

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