# Sasol

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# Safety Data Sheet

# Isopropyl Alcohol

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

| Product identifier<br>Trade name     | Isopropyl Alcohol   |
|--------------------------------------|---|
| Synonyms                             | Dimethyl carbinol, Isopropanol.   |
| EINECS-No.                           | 200-661-7   |
| Relevant identified uses of the subs | stance or mixture and uses advised against  |
| Use                                  | Solvent. Raw material for printing inks and printing ink additives. Paint related material. |
| Manufacturer or supplier's details   |   |
| Company                              | Sasol Chemicals, a division of Sasol South Africa (Pty) Ltd                                 |
| Address                              | Sasol Place, 50 Katherine Street<br>Sandton<br>2090<br>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 10 5100 3039 (China)  |
|                                      | +27 (0)17 610 4444 (South Africa)   |
|                                      |   |



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+61 (2) 8014 4558 (Australia)

## 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 heat/sparks/open flames/hot surfaces. No smoking.

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|-----------------------|---|---------------------------------------|
| Other hazards         | No data available   |                                       |
| Disposal              | Dispose of as hazardous waste in compliance with local and nat regulations.   | ional                                 |
| Storage               | P403 + P233 + P235: Store in a well-ventilated place. Keep cont<br>tightly closed. Keep cool.<br>P405: Store locked up.   | ainer                                 |
| Response              | <ul> <li>P240: Ground/bond container and receiving equipment.</li> <li>P241: Use explosion-proof electrical/ ventilating/ lighting equipm</li> <li>P242: Use only non-sparking tools.</li> <li>P243: Take precautionary measures against static discharge.</li> <li>P261: Avoid breathing vapours.</li> <li>P264: Wash hands thoroughly after handling.</li> <li>P271: Use only outdoors or in a well-ventilated area.</li> <li>P280: Wear protective gloves/ protective clothing/ eye protection protection.</li> <li>P303 + P361 + P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ she P370 + P378: In case of fire: Use dry sand, dry chemical or alcol resistant foam for extinction.</li> <li>P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to Continue rinsing.</li> <li>P337 + P313: If eye irritation persists: Get medical advice/ attent P304 + P340: IF INHALED: Remove victim to fresh air and keep in a position comfortable for breathing.</li> <li>P312: Call a POISON CENTER/doctor if you feel unwell.</li> </ul> | n/ face<br>ower.<br>hol-<br>or<br>do. |
|                       | P233: Keep container tightly closed.<br>P240: Ground/bond container and receiving equipment.  |                                       |



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## SECTION 3. Composition/information on ingredients

#### Substance

Propan-2-ol; isopropyl alcohol; isopropanol

**Contents:** 100.00 %W/W

CAS-No. 67-63-0

Index-No. 603-117-00-0 EC-No. 200-661-7 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

| Inhalation   | Move to fresh air in case of accidental inhalation of vapours. If<br>breathing is irregular or stopped, administer artificial<br>respiration. Call a physician immediately.                             |
|--------------|---|
| Skin contact | Wash off immediately with soap and plenty of water while<br>removing all contaminated clothes and shoes. Wash<br>contaminated clothing before re-use. If skin irritation persists,<br>call a physician. |
| Eye contact  | Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.  |
| Ingestion    | If swallowed, seek medical advice immediately and show this<br>container or label. Do not induce vomiting without medical<br>advice. Never give anything by mouth to an unconscious                     |

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person.

Most important symptoms/effects, acute and delayed

Refer to SECTION 11

## SECTION 5. Firefighting measures

| Suitable extinguishing media                                | Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO2).                      |
|---|---|
| Unsuitable extinguishing media                              | No information available.   |
| Special hazards arising<br>from the substance or<br>mixture | Flash back possible over considerable distance. Vapours may form explosive mixtures with air. |
| Special protective equipment for firefighters               | Wear self-contained breathing apparatus and protective suit.                                  |

## SECTION 6. Accidental release measures

| Personal precautions      | Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours or spray mist.       |  |  |
|---------------------------|---|--|--|
|                           | Ensure adequate ventilation.  |  |  |
| Environmental precautions | Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Do not allow material to |  |  |

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|                             |  |  |
|                             | contaminate ground water system. Do not flush into surface water or sanitary sewer system. |  |
| 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                            | Provide sufficient air exchange and/or exhaust in work rooms.<br>Wear personal protective equipment. Take precautionary<br>measures against static discharges. Ensure all equipment is<br>electrically grounded before beginning transfer operations. |
|---|---|
| Advice on protection against fire and explosion | Keep away from open flames, hot surfaces and sources of ignition.Use explosion-proof equipment.   |
| Temperature class                               | T1  |
| Fire-fighting class                             | Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.   |
| Requirements for storage areas and containers   | Keep container tightly closed in a dry and well-ventilated place.Keep away from heat.Keep away from direct sunlight.  |
| Advice on common storage                        | Keep containers tightly closed in a cool, well-ventilated place.  |

## SECTION 8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

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| Components        | Туре | Control     | Update | Basis             |
|-------------------|------|-------------|--------|-------------------|
|                   |      | parameters  |        |                   |
| ISOPROPYL ALCOHOL | TWA  | 980 mg/m3   | 1995   | South Africa RELs |
| PROPAN-2-OL       | TWA  | 400 ppm     | 1995   | South Africa RELs |
| PROPAN-2-OL       | STEL | 1,225 mg/m3 | 1995   | South Africa RELs |
|                   | STEL | 500 ppm     | 1995   | South Africa RELs |
|                   |      |             |        |                   |

## Exposure controls

#### **Engineering measures**

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

#### Personal protective equipment

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

## SECTION 9. Physical and chemical properties

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#### Information on basic physical and chemical properties

| Form                        | Liquid                     |
|-----------------------------|----------------------------|
| State of matter             | Liquid                     |
| Colour                      | Colourless                 |
| Odour                       | aromatic                   |
| Odour Threshold             | No data available          |
| рН                          | 7                          |
| Melting point/range         | -88.5 °C                   |
| Boiling point/boiling range | 82.22 °C                   |
| Flash point                 | 12 $^\circ~$ C; closed cup |
| Flash point                 | 18 $^{\circ}~$ C; open cup |
| Evaporation rate            | No data available          |
| Flammability (solid, gas)   | No data available          |
| Auto-ignition temperature   | 398.89 °C                  |
| Lower explosion limit       | 2 %(V)                     |
| Upper explosion limit       | 12 %(V)                    |
| Vapour pressure             | 44 hPa; 20 $^\circ$ C      |
| Relative vapour density     | 2.08(Air = 1.0)            |
| Density                     | 0.79 g/cm3                 |
| Water solubility            | Completely soluble         |
| Viscosity, dynamic          | 2.4 mPa.s                  |
| Viscosity, kinematic        | 0.1 mm2/s                  |

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## SECTION 10. Stability and reactivity

| Reactivity                         | Stable under recommended storage conditions.                           |
|------------------------------------|--|
| Chemical stability                 | Stable under recommended storage conditions.                           |
| Possibility of hazardous reactions | Hazardous polymerisation does not occur.                               |
| Conditions to avoid                | Extremes of temperature and direct sunlight. Heat, flames and sparks.  |
| Materials to avoid                 | Strong oxidizing agents Incompatible with acids. Halogenated compounds |
| Hazardous decomposition products   | Carbon oxides.   |

## SECTION 11. Toxicological information

| Acute oral toxicity       | Propan-2-ol; isopropyl alcohol; isopropanol:<br>LD50 Rat: > 2,000 mg/kg; (literature value)    |
|---------------------------|--|
| Acute inhalation toxicity | Propan-2-ol; isopropyl alcohol; isopropanol:<br>LC50 Rat: 8 h; > 20 mg/l; (literature value)   |
| Acute dermal toxicity     | Propan-2-ol; isopropyl alcohol; isopropanol:<br>LD50 Rabbit: > 2,000 mg/kg; (literature value) |
| Skin irritation           | Propan-2-ol; isopropyl alcohol; isopropanol:<br>Rabbit: Not irritating; (literature value)     |
| Eye irritation            | Propan-2-ol; isopropyl alcohol; isopropanol:<br>Rabbit: irritating (literature value)          |

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| Sensitisation | Propan-2-ol; isopropyl alcohol; isopropanol:<br>Buehler Test; Guinea pig: Not sensitizing; (literature value) |
|---------------|---|
| Mutagenicity  | Propan-2-ol; isopropyl alcohol; isopropanol:<br>Ames test: Salmonella typhimurium; with and without; Not      |
|               | mutagenic; (literature value)   |

# SECTION 12. Ecological information

| Toxicity to fish                                    | Propan-2-ol; isopropyl alcohol; isopropanol:<br>static test; Leuciscus idus melanotus; 48 h; LC50; > 100 n<br>(literature value)    | ng/l; |
|---|---|-------|
| Toxicity to daphnia and other aquatic invertebrates | Propan-2-ol; isopropyl alcohol; isopropanol:<br>static test; Daphnia magna (Water flea); 48 h; EC50; > 10<br>mg/l(literature value) | 0     |
| Toxicity to algae                                   | Propan-2-ol; isopropyl alcohol; isopropanol:<br>static test; Scenedesmus subspicatus72 h; EC50; > 100 n<br>(literature value)       | ng/l; |
| Biodegradability                                    | Propan-2-ol; isopropyl alcohol; isopropanol:<br>aerobic; activated sludge; 53 %; 5 d; Readily biodegradab<br>(literature value)     | ole.; |
| Bioaccumulation                                     | Propan-2-ol; isopropyl alcohol; isopropanol:<br>No bioaccumulation is to be expected (log Pow <= 4).                                |       |
| Mobility in soil                                    | Propan-2-ol; isopropyl alcohol; isopropanol:<br>No data available   |       |
| Results of PBT and vPvB                             | Propan-2-ol; isopropyl alcohol; isopropanol:  |       |
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| assessment                        | This substance is not considered to be very persistent and very bioaccumulating (vPvB). This substance is not considered to be persistent, bioaccumulating and toxic (PBT). |
| Other adverse effects             | Propan-2-ol; isopropyl alcohol; isopropanol:<br>No data available   |

## SECTION 13. Disposal considerations

#### Product

In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.

| SECTION 14. Transport information |             |       |
|-----------------------------------|-------------|-------|
| ADR                               |             |       |
| UN number:                        | 1219        |       |
| Class:                            | 3           |       |
| Packaging group:                  | II; F1;     |       |
| Proper shipping name:             | ISOPROPANOL |       |
| RID                               |             |       |
| UN number:                        | 1219        |       |
| Class:                            | 3           |       |
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| Packaging group:      | II; F1                 |
|-----------------------|------------------------|
| Proper shipping name: | ISOPROPANOL            |
| ADNR                  |                        |
| UN number:            | 1219                   |
| Class:                | 3                      |
| Packaging group:      | II; F1                 |
| Proper shipping name: | ISOPROPANOL            |
| IMDG                  |                        |
| UN number:            | 1219                   |
| Class:                | 3                      |
| EmS:                  | F-E, S-D               |
| Packaging group:      | II                     |
| Proper shipping name: | ISOPROPANOL            |
| Marine pollutant      | Not a Marine Pollutant |
| ICAO/IATA             |                        |
| UN number :           | 1219                   |
| Class:                | 3                      |

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| Packaging group:                                  | II   |
|---|--|
| Proper shipping name:                             | ISOPROPANOL                                |
| Transport in bulk according to Annex II of MARPOL | Isopropyl alcohol<br>Pollution Category: Z |
| 73/78 and the IBC Code                            |  |

## SECTION 15. Regulatory information

| Safety, health and environmental regulations/legislation specific for the substance or mixture |  |                     |
|--|--|---------------------|
| Registration, Evaluation and Authorisation of<br>Chemicals (REACH)                             | All chemical constituents are listed in: Registr<br>and Authorisation of Chemicals (REACH) (Se |                     |
| Switzerland Consolidated Inventory   | All chemical constituents are listed in: Switzer<br>Inventory (See chapter 3)                  | rland Consolidated  |
| USA TSCA Inventory   | All chemical constituents are listed in: USA TS<br>(See chapter 3)                             | SCA Inventory       |
| Canadian Domestic Substances List (DSL)  | All chemical constituents are listed in: Canadi<br>Substances List (DSL) (See chapter 3)       | an Domestic         |
| Australian Inv. of Chem. Substances (AICS)   | All chemical constituents are listed in: Austral Substances (AICS) (See chapter 3)             | ian Inv. of Chem.   |
| New Zealand Inventory of Chemicals (NZIoC)   | All chemical constituents are listed in: New Ze<br>Chemicals (NZIoC) (See chapter 3)           | ealand Inventory of |
| Jap. Inv. of Exist. & New Chemicals (ENCS)   | All chemical constituents are listed in: Jap. In<br>Chemicals (ENCS) (See chapter 3)           | v. of Exist. & New  |
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| Japan. Industrial Safety & Health Law (ISHL)                          | All chemical constituents are listed in: Japan. Industrial Safety & Health Law (ISHL) (See chapter 3)                          |
|---|--|
| Korea. Existing Chemicals Inventory (KECI)                            | All chemical constituents are listed in: Korea. Existing<br>Chemicals Inventory (KECI) (See chapter 3)                         |
| Philippines Inventory of Chemicals and<br>Chemical Substances (PICCS) | All chemical constituents are listed in: Philippines Inventory of<br>Chemicals and Chemical Substances (PICCS) (See chapter 3) |
| Inv. of Exist. Chem. Substances in China                              | All chemical constituents are listed in: Inv. of Exist. Chem.<br>Substances in China (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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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.

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