



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

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

**Product identifier**

**Trade name**

Iso-Butanol

**Synonyms**

2-Methyl-propan-1-ol, 2-Methylpropyl alcohol, 1-Hydroxymethylpropane, Isopropyl Carbinol, i-Butyl alcohol.

**Product code**

2059

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

**Use**

Solvent. Raw material for washing and cleaning agents. Raw material for fragrances. Paint related material. Industrial use.

**Manufacturer or supplier's details**

**Company**

Sasol Chemicals, a division of Sasol South Africa Ltd

**Address**

Sasol Place, 50 Katherine Street  
Sandton  
2090

**Telephone**

South Africa  
+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)

# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

0800 112 890 RSA-Local only

+61 (2) 8014 4558 (Australia)

### SECTION 2. Hazards identification

#### Classification of the substance or mixture

#### GHS Classification

**Notification of the ministry of industry on the system of classification and hazard communication of hazardous substances B.E. 2555 (GHS 2009)**

|                       |  |            |
|-----------------------|--|------------|
| <b>Classification</b> | Flammable liquids                                | Category 3 |
|                       | Acute toxicity (Oral)                            | Category 5 |
|                       | Acute toxicity (Dermal)                          | Category 5 |
|                       | Skin corrosion/irritation                        | Category 2 |
|                       | Serious eye damage/eye irritation                | Category 1 |
|                       | Specific target organ toxicity - single exposure | Category 3 |

#### GHS label elements

Hazard pictograms



Signal word

:

Danger

Hazard statements

:

H226 Flammable liquid and vapour.  
H303 + H313 May be harmful if swallowed or in contact with skin.



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.

### Precautionary statements

#### **Prevention:**

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/ ventilating/ lighting equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ eye protection/ face protection.

#### **Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.



## Safety Data Sheet

### Iso-Butanol

Version 1.00

Revision Date 27.02.2019

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

**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 which do not result in classification**

None known.



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

### SECTION 3. Composition/information on ingredients

#### Substance

##### Iso-butanol

Contents: 99.50 %W/W

CAS-No. 78-83-1

Index-No. 603-108-00-1

EC-No. 201-148-0

Hazard statements *H226 H315 H318 H335 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. Get medical attention immediately     |
| <b>Skin contact</b> | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.              |
| <b>Eye contact</b>  | Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Get medical attention immediately                              |
| <b>Ingestion</b>    | If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious |



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

person.

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

Refer to SECTION 11

## SECTION 5. Firefighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                          | Water spray, Foam, CO <sub>2</sub> , Dry powder.             |
| <b>Unsuitable extinguishing media</b>                        | Do NOT use water jet.  |
| <b>Special hazards arising from the substance or mixture</b> | Hazardous decomposition products                             |
| <b>Special protective equipment for firefighters</b>         | Wear self-contained breathing apparatus and protective suit. |

## SECTION 6. Accidental release measures

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | Use personal protective equipment. Do not breathe vapours or spray mist. Ensure adequate ventilation. Keep away from sources of ignition - No smoking. |
| <b>Environmental precautions</b> | Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.   |



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). The material taken up must be disposed of in accordance with regulations.

**Reference to other sections** Refer to Section 8 and 13

### SECTION 7. Handling and storage

**Safe handling advice** Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from sources of ignition - No smoking.

**Advice on protection against fire and explosion** No data available

**Requirements for storage areas and containers** Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

**Advice on common storage** No data available

### SECTION 8. Exposure controls/personal protection

#### Components with workplace control parameters

#### NATIONAL OCCUPATIONAL EXPOSURE LIMITS

Contains no substances with occupational exposure limit values.

#### Exposure controls

#### Engineering measures

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

# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

### Personal protective equipment

|                                 |   |
|---------------------------------|---|
| <b>Respiratory protection</b>   | Wear self-contained breathing apparatus and protective suit.  |
| <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> | Protective suit Safety shoes  |
| <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>                       | Sweet musty                  |
| <b>Odour Threshold</b>             | No data available            |
| <b>Melting point/range</b>         | -108 ° C                     |
| <b>Boiling point/boiling range</b> | 108 ° C                      |
| <b>Flash point</b>                 | 28 ° C; closed cup           |



## Safety Data Sheet

### Iso-Butanol

Version 1.00

Revision Date 27.02.2019

|                                  |                                  |
|----------------------------------|----------------------------------|
| <b>Evaporation rate</b>          | No data available                |
| <b>Flammability (solid, gas)</b> | No data available                |
| <b>Auto-ignition temperature</b> | 428.7 ° C                        |
| <b>Vapour pressure</b>           | 14 hPa; 20 ° C                   |
| <b>Relative vapour density</b>   | 2.55                             |
| <b>Density</b>                   | 0.801 g/cm <sup>3</sup> ; 20 ° C |
| <b>Water solubility</b>          | Partly soluble, Partly miscible  |
| <b>Viscosity, dynamic</b>        | 4.7 mPa.s                        |
| <b>Viscosity, kinematic</b>      | 4.609 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.                          |
| <b>Materials to avoid</b>                 | Oxidizing agents. Reducing agents Acids and bases |
| <b>Hazardous decomposition products</b>   | No decomposition if stored normally.              |

## SECTION 11. Toxicological information

# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

|                               |  |
|-------------------------------|--|
| <b>Acute oral toxicity</b>    | Iso-butanol:<br>LD50 Rat: > 2,000 mg/kg; OECD Test Guideline 401;<br>(literature value)  |
| <b>Acute dermal toxicity</b>  | Iso-butanol:<br>LD50 Rabbit: > 2,000 mg/kg; OECD Test Guideline 402;<br>(literature value)   |
| <b>Skin irritation</b>        | Iso-butanol:<br>Rabbit: irritating; OECD Test Guideline 404 (literature value)   |
| <b>Eye irritation</b>         | Iso-butanol:<br>Rabbit: Risk of serious damage to eyes. OECD Test Guideline 405 (literature value)   |
| <b>Sensitisation</b>          | No data available  |
| <b>Repeated dose toxicity</b> | No data available  |
| <b>Carcinogenicity</b>        | No data available  |
| <b>Mutagenicity</b>           | Iso-butanol:<br>Experiments showed mutagenic effects in cultured bacterial cells. Ames test: Salmonella typhimurium; with and without; Not mutagenic; (literature value) |
| <b>Further Information</b>    | This information is not available.   |

## SECTION 12. Ecological information

|                         |  |
|-------------------------|--|
| <b>Toxicity to fish</b> | Iso-butanol:<br>semi-static test; Pimephales promelas; 96 h; LC50; > 100 mg/l; |
|-------------------------|--|



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

|  |   |
|--|---|
|  | literature value; (literature value)  |
| <b>Toxicity to daphnia and other aquatic invertebrates</b> | Iso-butanol:<br>static test; Daphnia magna (Water flea); 48 h; EC50; (literature value)   |
| <b>Toxicity to algae</b>                                   | Iso-butanol:<br>static test; Scenedesmus quadricauda 8 d; EC50; (literature value)  |
| <b>Toxicity to bacteria</b>                                | No data available   |
| <b>Toxicity to fish</b>                                    | No data available   |
| <b>Chronic toxicity in aquatic invertebrates</b>           | No data available   |
| <b>Biodegradability</b>                                    | Iso-butanol:<br>aerobic; > 70 %; 14 d; Readily biodegradable.; OECD Guideline 301 A (new version); (literature value)   |
| <b>Bioaccumulation</b>                                     | No data available   |
| <b>Mobility in soil</b>                                    | Iso-butanol:<br>No data available   |
| <b>Results of PBT and vPvB assessment</b>                  | Iso-butanol:<br>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>Other adverse effects</b>                               | Iso-butanol:<br>No data available   |



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

### SECTION 13. Disposal considerations

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

### SECTION 14. Transport information

#### ADR

**UN number:** 1212  
**Class:** 3  
**Packaging group:** III; F1;  
**Proper shipping name:** ISOBUTANOL

#### RID

**UN number:** 1212  
**Class:** 3  
**Packaging group:** III; F1  
**Proper shipping name:** ISOBUTANOL

#### IMDG

**UN number:** 1212  
**Class:** 3  
**EmS:** F-E, S-D



## Safety Data Sheet

### Iso-Butanol

Version 1.00

Revision Date 27.02.2019

|   |   |
|---|---|
| <b>Packaging group:</b>   | III   |
| <b>Proper shipping name:</b>  | ISOBUTANOL  |
| <b>Marine pollutant</b>   | Not a Marine Pollutant                                    |
| <b>ICAO/IATA</b>  |   |
| <b>UN number :</b>  | 1212  |
| <b>Class:</b>   | 3   |
| <b>Packaging group:</b>   | III   |
| <b>Proper shipping name:</b>  | ISOBUTANOL  |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Isobutyl alcohol<br>Ship Type: 3<br>Pollution Category: Z |

## SECTION 15. Regulatory information

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

|   |   |
|---|---|
| <b>Inv. of Exist. Chem. Substances in China</b>   | All chemical constituents are listed in: Inv. of Exist. Chem. Substances in China (See chapter 3) |
| <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.                                 |

Print Date 11.03.2019

100000000534

13/15



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

|   |   |
|---|---|
|   | 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)                       |
| <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

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H335 May cause respiratory 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



# Safety Data Sheet

## Iso-Butanol

Version 1.00

Revision Date 27.02.2019

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.

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.