

Revision date : 2025/10/07 Page: 1/13

Version: 5.0 (30034839/SDS_GEN_MX/EN)

1. Identification

Product identifier used on the label

ISOBUTANOL

Recommended use of the chemical and restriction on use

Recommended use*: Chemical

Recommended use*: for industrial use only

Unsuitable for use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

BASF Mexicana S.A. de C.V. Av. Insurgentes Sur 975 Col. CD. De Los Deportes, C.P. 03710 Ciudad de México MÉXICO

Telephone: +52 55 5325 2600

Emergency telephone number

24 Hour Emergency Response Information

SETIQ: 1800-00-214-(Rep. Mexicana) or 55-59-15-88 (CDMX)

Telephone: +1-800-849-5204 or +1-833-229-1000

Other means of identification

Molecular formula: C(4) H(10) O
Chemical family: alcohol, aliphatic
Synonyms: 2-Methyl-1-Propanol
Isobutyl Alcohol

2. Hazards Identification

According to Regulation NOM-018-STPS-2015

Classification of the product

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Revision date: 2025/10/07 Page: 2/13 Version: 5.0 (30034839/SDS_GEN_MX/EN)

Flam. Liq. 3 Flammable liquids
Skin Irrit. 2 Skin irritation
Eve Dam. 1 Serious eye damage

STOT SE 3 (May cause Specific target organ toxicity — single exposure

drowsiness and

dizziness.)

STOT SE 3 (irritating to Specific target organ toxicity — single exposure

respiratory system)

Label elements

Pictogram:





Signal Word:

Danger

Hazard Statement:

H226 Flammable liquid and vapour. H318 Causes serious eye damage.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness. H335 May cause respiratory irritation.

Precautionary Statements (Prevention):

P280 Wear protective gloves and eye protection or face protection.

P271 Use only outdoors or in a well-ventilated area.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P261 Avoid breathing mist or vapour or spray.
P243 Take action to prevent static discharges.

P241 Use explosion-proof electrical, ventilating and lighting equipment.

P264 Wash contaminated body parts thoroughly after handling. P240 Ground and bond container and receiving equipment.

P242 Use non-sparking tools.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or physician.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

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

Rinse skin with water or shower.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder

or water spray for extinction.

Precautionary Statements (Storage):

P233 Keep container tightly closed.

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

P405 Store locked up.

Precautionary Statements (Disposal):

Revision date: 2025/10/07 Page: 3/13 Version: 5.0 (30034839/SDS GEN MX/EN)

P501

Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

According to Regulation NOM-018-STPS-2015

Isobutanol

CAS Number: 78-83-1

Content (W/W): >= 80.0 - <= 100.0% Synonym: 2-Methyl-1-propanol; Isobutanol

1-Propanol

CAS Number: 71-23-8

Content (W/W): >= 0.1 - <= 1.0% Synonym: 1-Propanol; Propyl alcohol

n-butanol

CAS Number: 71-36-3

Content (W/W): >= 0.1 - <= 1.0% Synonym: 1-Butanol; n-Butanol

The actual concentration is withheld as a trade secret.

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Revision date: 2025/10/07 Page: 4/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Most important symptoms and effects, both acute and delayed

Symptoms: Overexposure may cause:, coma, coordination disorder, headache, dizziness Hazards: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11. (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

dry powder, water spray, carbon dioxide, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:

water jet

Additional information:

Use extinguishing measures to suit surroundings.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:

Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Impact Sensitivity:

Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Page: 5/13 Revision date: 2025/10/07 Version: 5.0 (30034839/SDS GEN MX/EN)

Pack in tightly closed containers for disposal.

Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Ground all transfer equipment properly to prevent electrostatic discharge.

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

TWA value 20 ppm;

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

1-Propanol OEL, MX: TWA value 100 ppm; OEL, MX:

Isobutanol OEL, MX: TWA value 50 ppm;

Advice on system design:

Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

n-butanol

Chemical resistant protective gloves, Suitable materials, chloroprene rubber (Neoprene), Manufacturer's directions for use should be observed because of great diversity of types.

Revision date: 2025/10/07 Page: 6/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Eve protection:

Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Avoid inhalation of vapour. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Work place should be equipped with a shower and an eye wash. Avoid inhalation of vapours/mists. Wear protective clothing as necessary to prevent contact. Wash soiled clothing immediately. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Physical state: liquid
Form: liquid
Odour: alcohol-like
Odour threshold: not determined

Colour: clear

pH value: not applicable

Melting point: < -90 °C (ASTM D97)

Freezing point: No data available.

Boiling point: 108 °C (OECD Guideline

(1,013 hPa) 103)

Boiling range: No data available.

Sublimation point: No applicable information available.

Flash point: 31 °C (ISO 2719, closed

cup)

Flammability: Flammable liquid and vapour. (derived from flash

point)

Lower explosion limit: 1.1 %(V)

(19.9°C)

The lower explosion point of the substance/mixture has been determined. The explosion point describes the temperature of a flammable liquid at which the

concentration of the saturated vapour mixed with air equals the lower

explosion limit.

Upper explosion limit: 11.7 %(V)

(59.4°C)

The upper explosion point of the substance/mixture has been determined. This explosion point describes the temperature of a flammable liquid at which the

concentration of the saturated vapour mixted with air equals the upper

explosion limit.

Heat of Combustion: 36.04 kJ/g

Autoignition: 400 °C (DIN 51794)

Revision date: 2025/10/07 Page: 7/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Vapour pressure: 9.5 hPa

(20 °C) 70.7 hPa (50 °C)

Density: 0.8017 g/cm3 (DIN 51757)

(20°C)

Relative density: 0.8017 (DIN 51757)

(20 °C)

Relative vapour density: 2.55 (calculated)

(20 °C)

Heavier than air.

Partitioning coefficient n- 1 (OECD Guideline

octanol/water (log Pow): (25 °C) 117)

Self-ignition not self-igniting

temperature:

Thermal decomposition: No data available. Viscosity, dynamic: 3.103 mPa.s (20 °C)

Literature data.

Viscosity, kinematic: No applicable information available.

Solubility in water: 70 g/l (20 °C)

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): organic solvents,

Molecular weight: 74.12 g/mol Evaporation rate: No data available.

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular

form

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Formation of Remarks: Forms no flammable gases in the

flammable gases: presence of water.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Reacts with strong oxidizing agents.

Conditions to avoid

No special precautions other than good housekeeping of chemicals.

Revision date: 2025/10/07 Page: 8/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Incompatible materials

strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No data available.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion. Of low toxicity after short-term skin contact. Virtually nontoxic by inhalation.

If used as intended, this product is not expected to present a physical or health hazard.

<u>Oral</u>

Type of value: LD50 Species: rat (male/female)

Value: > 2,830 - 3,350 mg/kg (OECD Guideline 401)

Inhalation

Type of value: LC50 Species: rat (male/female)

Value: > 18.18 mg/l (similar to OECD guideline 403)

Exposure time: 6 h
The vapour was tested.

Dermal

Type of value: LD50

Species: rabbit (male/female)

Value: > 2,000 - 2,460 mg/kg (OECD Guideline 402)

Assessment other acute effects

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness). Causes temporary irritation of the respiratory tract.

Irritation / corrosion

Assessment of irritating effects: May cause severe damage to the eyes. Skin contact causes irritation.

Revision date: 2025/10/07 Page: 9/13 Version: 5.0 (30034839/SDS GEN MX/EN)

<u>Skin</u>

Species: rabbit Result: Irritant.

Method: OECD Guideline 404

Eye

Species: rabbit

Result: irreversible damage Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Guinea pig maximization test

Species: guinea pig Result: Non-sensitizing.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard

Some authorities consider isobutyl alcohol, n-primary alcohols and ketones with C3-C13 as "May be harmful if swallowed and enters airways"

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No substance-specific organioxicity was observed after repeated administration to animals.

No known chronic effects.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Experiences in humans

High concentrations have a narcotizing effect.

12. Ecological Information

Toxicity

Revision date: 2025/10/07 Page: 10/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) 1,430 mg/l, Pimephales promelas (Fish test acute, Flow through.) The statement of the toxic effect relates to the analytically determined concentration.

Aquatic invertebrates

EC50 (48 h) 1,100 mg/l, Daphnia pulex (ASTM E1193-97, static) Nominal concentration.

Aquatic plants

EC50 (72 h) 1,799 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to fish

No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 20 mg/l, Daphnia magna (Daphnia test chronic, semistatic) Nominal concentration.

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 8 aquatic

bacterium/Toxic limit concentration (16 h): 280 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

70 - 80 % BOD of the ThOD (28 d) (OECD 301D; 92/69/EWG, C.4-E) (aerobic, other)

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis)

No data available.

No data available.

Bioaccumulative potential

Assessment bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Revision date: 2025/10/07 Page: 11/13 Version: 5.0 (30034839/SDS_GEN_MX/EN)

Bioaccumulation potential

No data available.

Mobility in soil

Assessment transport between environmental compartments

The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Additional information

Adsorbable organically-bound halogen(AOX):

This product contains no organically-bound halogen.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

Disposal must be made according to official regulations.

14. Transport Information

Land transport

TDG

Hazard class: 3 Packing group: III

ID number: UN 1212

Hazard label: 3

Proper shipping name: ISOBUTANOL (ISOBUTYL ALCOHOL)

Sea transport

IMDG

Hazard class: 3 Packing group: III

ID number: UN 1212

Hazard label: 3
Marine pollutant: NO

Proper shipping name: ISOBUTANOL (ISOBUTYL ALCOHOL)

Air transport

IATA/ICAO

Hazard class: 3 Packing group: III

ID number: UN 1212

Hazard label: 3

Proper shipping name: ISOBUTANOL

15. Regulatory Information

Revision date: 2025/10/07 Page: 12/13 Version: 5.0 (30034839/SDS GEN MX/EN)

Federal Regulations

Not applicable

NFPA Hazard codes:

Health: 2 Fire: 3 Reactivity: 0 Special:

HMIS III rating

Health: 2 Flammability: 3 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Flam. Liq. 3 Flammable liquids Eye Dam. 1 Serious eye damage

STOT SE 3 (irritating to Specific target organ toxicity — single exposure

respiratory system)

Skin Irrit. 2 Skin irritation

STOT SE 3 (May cause Specific target organ toxicity — single exposure

drowsiness and

dizziness.)

Acute Tox.5 (oral)Acute toxicityAcute Tox.5 (dermal)Acute toxicityAsp. Tox.2Aspiration hazard

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2025/10/07

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED

Revision date: 2025/10/07 Page: 13/13 Version: 5.0 (30034839/SDS_GEN_MX/EN)

WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

Date / Revised: 2025/10/07 Version: 5.0

Date / Previous version: 2023/10/25 Previous version: 4.0

END OF DATA SHEET