# SAFETY DATA SHEET

Version 8.9
Revision Date 08/08/2025
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## SECTION 1. IDENTIFICATION

### 1.1 Product identifiers

Product name : Isobutyl acrylate

Product Number : 436305
Brand : Aldrich
Index-No. : 607-115-00-0
CAS-No. : 106-63-8

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone number

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Flammable liquids : Category 3

Acute toxicity : Category 4

(Inhalation)

| | | |
|---|---|---|
| Acute toxicity (Dermal) | : | Category 4 |
| Skin irritation | : | Category 2 |
| Skin sensitisation | : | Category 1 |
| Specific target organ toxicity - single exposure | : | Category 3 (Respiratory system) |
| Short-term (acute) aquatic hazard | : | Category 2 |
| Long-term (chronic) aquatic hazard | : | Category 3 |

**Other hazards**

None known.

**GHS label elements**

Hazard pictograms :

Signal Word : Warning

Hazard Statements :
H226 Flammable liquid and vapour.
H312 + H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

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.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed

out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

**Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

**Disposal:**

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

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

**Components**

| Chemical name | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|---|---|---|---|
| Isobutyl acrylate | 106-63-8* | >= 90 - <= 100 | - |

* Indicates that the identifier is a CAS No.
Actual concentration is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

General advice : Show this safety data sheet to the doctor in attendance.

If inhaled : After inhalation: fresh air.

In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Consult a physician.

| | | |
|---|---|---|
| In case of eye contact | : | After eye contact: rinse out with plenty of water.<br>Remove contact lenses. |
| If swallowed | : | After swallowing: immediately make victim drink water (two glasses at most).<br>Consult a physician. |
| Most important symptoms and effects, both acute and delayed | : | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 |
| Protection of first-aiders | : | For personal protection see section 8. |
| Notes to physician | : | No data available |

## SECTION 5. FIREFIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Water<br>Foam<br>Carbon dioxide (CO2)<br>Dry powder |
| Unsuitable extinguishing media | : | For this substance/mixture no limitations of extinguishing agents are given. |
| Specific hazards during fire fighting | : | Combustible.<br><br>Vapours are heavier than air and may spread along floors.<br><br>Forms explosive mixtures with air at elevated temperatures.<br><br>Development of hazardous combustion gases or vapours possible in the event of fire. |
| Hazardous combustion products | : | Carbon oxides |
| Specific extinguishing methods | : | No data available |

| | | |
|---|---|---|
| Further information | : | Remove container from danger zone and cool with water.<br>Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| Special protective equipment for fire-fighters | : | Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Advice for non-emergency personnel:<br>Do not breathe vapours, aerosols.<br>Avoid substance contact.<br>Ensure adequate ventilation.<br>Keep away from heat and sources of ignition.<br>Evacuate the danger area, observe emergency procedures, consult an expert.<br>Advice for emergency responders:<br>For personal protection see section 8. |
| Environmental precautions | : | Do not let product enter drains.<br>Risk of explosion. |
| Methods and materials for containment and cleaning up | : | Cover drains. Collect, bind, and pump off spills.<br>Observe possible material restrictions (see sections 7 and 10).<br>Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area. |

## SECTION 7. HANDLING AND STORAGE

For precautions see section 2.2.

| | | |
|---|---|---|
| Advice on protection against fire and explosion | : | Keep away from open flames, hot surfaces and sources of ignition.<br>Take precautionary measures against static discharge. |
| Advice on safe handling | : | Work under hood. Do not inhale substance/mixture.<br>Avoid generation of vapours/aerosols. |
| Further information on storage conditions | : | Keep container tightly closed in a dry and well-ventilated place.<br>Keep away from heat and sources of ignition. |
| Storage class | : | 3, Flammable liquids |

| | | |
|---|---|---|
| Recommended storage temperature | : | Recommended storage temperature see product label. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures** : No data available

**Personal protective equipment**

Respiratory protection : required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hand protection

| | | |
|---|---|---|
| Material | : | butyl-rubber |
| Break through time | : | 480 min |
| Glove thickness | : | 0.3 mm |
| Protective index | : | Full contact |
| Manufacturer | : | Butoject® (KCL 897 / Aldrich Z677647, Size M) |

| | | |
|---|---|---|
| Material | : | butyl-rubber |
| Break through time | : | 480 min |
| Glove thickness | : | 0.3 mm |
| Protective index | : | Splash contact |
| Manufacturer | : | Butoject® (KCL 897 / Aldrich Z677647, Size M) |

| | | |
|---|---|---|
| Manufacturer | : | data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 |

| | | |
|---|---|---|
| Remarks | : | Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves |

after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

| | | |
|---|---|---|
| Eye protection | : | Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).<br>Safety glasses |
| Skin and body protection | : | Flame retardant antistatic protective clothing. |
| Hygiene measures | : | Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | clear, liquid |
| Color | : | colourless |
| Odor | : | ester-like |
| Odor Threshold | : | No data available |
| pH | : | No data available |
| Melting point/ range | : | -78 °F / -61 °C |
| Boiling point/boiling range | : | 270 °F / 132 °C<br>Method: lit. |
| Flash point | : | 90 °F / 32 °C<br>Method: closed cup |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Flammability (liquids) | : | No data available |

| | | |
|---|---|---|
| Burning rate | : | No data available |
| Self-ignition | : | 662 °F / 350 °C<br>1,013 hPa |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | 9.58 hPa (77 °F / 25 °C) |
| Relative vapour density | : | No data available |
| Relative density | : | 0.89 (68 °F / 20 °C) |
| Density | : | 0.89 g/cm3 (77 °F / 25 °C)<br>Method: lit. |
| Solubility(ies) | | |
| Water solubility | : | 1.8 g/l soluble (77 °F / 25 °C) |
| Partition coefficient: n-octanol/water | : | log Pow: 2.38 (77 °F / 25 °C) |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | 0.822 mPa.s (70.0 °F / 21.1 °C) |
| Viscosity, kinematic | : | No data available |
| Flow time | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | none |
| Surface tension | : | 24.7 mN/m, 77 °F / 25 °C |
| Molecular weight | : | 128.17 g/mol |
| Particle characteristics | | |
| Particle size | : | No data available |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | Vapour/air-mixtures are explosive at intense warming. |
| Chemical stability | : | The product is chemically stable under standard ambient conditions (room temperature) . |
| Contains the following stabiliser(s): | : | hydroquinone monomethyl ether (>0.001 - <0.002 %) |
| Possibility of hazardous reactions | : | No data available |
| Conditions to avoid | : | Avoid moisture.<br><br>Heating. |
| Incompatible materials | : | Strong oxidizing agents<br>Aldehydes<br>Azides |
| Hazardous decomposition products | : | In the event of fire: see section 5 |

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
Acute toxicity estimate Oral - 4,895 mg/kg
(Calculation method)
LD50 Oral - Rat - male and female - 4,895 mg/kg
(OECD Test Guideline 401)
Acute toxicity estimate Inhalation - 4 h - 11 mg/l - vapour(Calculation method)

LC50 Inhalation - Rat - 4 h - 2828 ppm - vapour

Acute toxicity estimate Dermal - 1,100 mg/kg
(Calculation method)
Dermal: No data available
No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Irritating to skin. - 20 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**

Test Type: Ames test
Test system: S. typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Micronucleus test
Species: Mouse

Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: AT2100000
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**Isobutyl acrylate:**

| | | |
|---|---|---|
| Toxicity to fish | : | LC50 (Pimephales promelas (fathead minnow)): 2.09 mg/l<br>Exposure time: 96 h<br>Test Type: flow-through test |

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | EC50 (Daphnia magna (Water flea)): 19.8 mg/l<br>Exposure time: 48 h<br>Test Type: static test<br>Method: Directive 67/548/EEC, Annex V, C.2. |
| Toxicity to algae/aquatic plants | : | EC50 (Desmodesmus subspicatus (green algae)): 5.28 mg/l<br>Exposure time: 72 h<br>Test Type: static test<br>Method: OECD Test Guideline 201 |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | NOEC (Daphnia magna (Water flea)): 0.457 mg/l<br>Exposure time: 21 d<br>Test Type: Growth inhibition<br>Method: OECD Test Guideline 211 |
| Toxicity to microorganisms | : | EC50 (Sludge Treatment): > 1,000 mg/l<br>Exposure time: 30 min<br>Test Type: Respiration inhibition<br>Method: OECD Test Guideline 209 |

**Persistence and degradability**

**Components:**

**Isobutyl acrylate:**

| | | |
|---|---|---|
| Biodegradability | : | aerobic<br>Inoculum: activated sludge<br>Concentration: 30 mg/l<br>Result: Readily biodegradable.<br>Biodegradation: 80 - 90 %<br>Exposure time: 28 d |

**Bioaccumulative potential**

**Components:**

**Isobutyl acrylate:**

| | | |
|---|---|---|
| Partition coefficient: n-octanol/water | : | log Pow: 2.38 (77 °F / 25 °C) |

**Mobility in soil**

No data available

**Other adverse effects**

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | Waste material must be disposed of in accordance with the national and local regulations. Leave |

chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14. TRANSPORT INFORMATION

### International Regulations

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 2527 |
| Proper shipping name | : | Isobutyl acrylate, stabilized |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | Class 3 - Flammable liquids |
| Packing instruction (cargo aircraft) | : | 366 |
| Packing instruction (passenger aircraft) | : | 355 |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 2527 |
| Proper shipping name | : | ISOBUTYL ACRYLATE, STABILIZED |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | 3 |
| EmS Code | : | F-E, S-D |
| Marine pollutant | : | no |

**Transport in bulk according to IMO instruments**

Not applicable for product as supplied.

### National Regulations

**49 CFR Road**

| | | |
|---|---|---|
| UN/ID/NA number | : | UN 2527 |
| Proper shipping name | : | Isobutyl acrylate, stabilized |
| Class | : | 3 |
| Packing group | : | III |
| Labels | : | Class 3 - Flammable liquids |
| ERG Code | : | 129P |
| Marine pollutant | : | no |
| Poison Inhalation Hazard | : | No |

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

| | | |
|---|---|---|
| **SARA 311/312 Hazards** | : | Fire Hazard<br>Acute Health Hazard |
| **SARA 313** | : | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| Isobutyl acrylate | 106-63-8 |

**Massachusetts Right To Know**

| | |
|---|---|
| Isobutyl acrylate | 106-63-8 |

**Pennsylvania Right To Know**

| | |
|---|---|
| Isobutyl acrylate | 106-63-8 |

**Pennsylvania Right To Know**

| | |
|---|---|
| Isobutyl acrylate | 106-63-8 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**New Jersey Right To Know**

| | |
|---|---|
| Isobutyl acrylate | 106-63-8 |

**The components of this product are reported in the following inventories:**

| | | |
|---|---|---|
| TSCA | : | All substances listed as active on the TSCA inventory |

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16. OTHER INFORMATION

### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.


Revision Date : 08/08/2025

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