

Version: v1  
Revision Date: 2023-07-24  
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## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name : Isobutyric anhydride  
Product Number : I109579  
Brand : aladdin  
CAS-No. : 97-72-3

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

Identified uses : It is only for scientific research purposes, not for medicine, family standby medicine or other purposes.

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

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd  
Address : 36 Xinjinqiao Road, Shanghai  
Telephone : 400-620-6333  
Fax : no data available

#### 1.4 Emergency telephone number

Emergency Phone : 0532-83889090

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

#### 2.2 GHS Label elements, including precautionary statements

##### Pictogram



##### Signal word

Danger

##### Hazard statement(s)

H301 Toxic if swallowed  
H311 Toxic in contact with skin  
H314 Causes severe skin burns and eye damage

##### Precautionary statement(s)

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

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**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

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**SECTION 3: Composition/information on ingredients****3.1 Substances**

Synonyms : 2-Methylpropionic anhydride  
Formula : C<sub>8</sub>H<sub>14</sub>O<sub>3</sub>  
Molecular weight : 158.19  
CAS No. : 97-72-3  
EC-NO. : no data available

Component	Classification	Concentration
Isobutyric anhydride	no data available	98%

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**SECTION 4: First aid measures****4.1 Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

**4.2 Most important symptoms and effects, both acute and delayed**

no data available

**4.3 Indication of any immediate medical attention and special treatment needed**

no data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water

**Unsuitable extinguishing media**

no data available

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**5.2 Special hazards arising from the substance or mixture**

Hazardous decomposition products formed under fire conditions.- Carbon oxides

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

no data available

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**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection.Avoid breathing vapors, mist or gas.Ensure adequate ventilation.Remove all sources of  
<br/>ignition.Evacuate personnel to safe areas.Beware of vapours accumulating to form explosive concentrations.Vapours  
<br/>can accumul

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so.Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in  
<br/>container for disposal according to local regulations (see section 13).Keep in suitable, closed containers for disposal.  
<br/>

**6.4 Reference to other sections**

no data available

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Avoid contact with skin and eyes.Avoid inhalation of vapour or mist.<br/>Keep away from sources of ignition - No  
smoking.Take measures to prevent the build up of electrostatic charge.<br/>

**7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place.Containers which are opened must be carefully resealed  
<br/>and kept upright to prevent leakage.<br/>Moisture sensitive.<br/>

**7.3 Specific end use(s)**

no data available

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**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

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## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove is 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.

Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

Material tested: Butoject? (KCL 897 / Aldrich Z677647, Size M)

Splash protection

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 30 min

Material tested: Lapren? (KCL 706 / Aldrich Z677558, Size M)

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

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 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.

#### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	-53 °C
f) Initial boiling point and boiling range	182 °C
g) Flash point	66.4 °C
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available

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o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties N	no data available
t) Oxidizing properties N	no data available

**9.2 Other safety information**

no data available

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

Stable under recommended storage conditions.

**10.2 Chemical stability**

no data available

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

Strong oxidizing agents, Strong bases

**10.5 Incompatible materials**

Hazardous decomposition products formed under fire conditions.- Carbon oxides <br/>Other decomposition products - no data available <br/>

**10.6 Hazardous decomposition products**

Oral LD50 LD50 Oral - rat - 266 mg/kg Inhalation LC50 no data available Aldrich - 245771 Page 5 of 7 Dermal LD50 LD50 Dermal - rabbit - 475 mg/kg Other information on acute toxicity no data available

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

**Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

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**Germ cell mutagenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as <br/>probable, possible or confirmed human carcinogen by IARC.<br/>ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a <br/>carcinogen or potential carcinogen by ACGIH.<br/>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a <br/>known or anticipated carcinogen by NTP.<br/>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a <br/>carcinogen or potential carcinogen by OSHA.<br/>

**Carcinogenicity**

no data available

**Reproductive toxicity**

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

**Additional Information**

no data available

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**SECTION 12: Ecological information****12.1 Toxicity**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

no data available

**12.6 Other adverse effects**

no data available

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**SECTION 13:****13.1 Disposal considerations**

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**Product**

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

no data available

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**SECTION 14: Transport information****DOT (US)**

UN number: 2922

Packing group: III

Class: 8(6.1)

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Isobutyric anhydride)

Reportable Quantity(RQ): no data available Poison Inhalation Hazard: no data

Environmental Hazards: 否

**IMDG**

UN number: 2922

Packing group: III

EMS-No: no data available

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Isobutyric anhydride)

**IATA**

UN number: 2922

Packing group: III

Class: 8(6.1)

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (Isobutyric anhydride)

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**SECTION 15: Regulatory information**

no data available

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**SECTION 16: Other information****Further information**

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