

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 2-Methylbutyric acid
 Product Number : 193070
 Brand : Aldrich
 Company : Sigma-Aldrich Canada, Ltd
 2149 Winston Park Drive
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 CANADA
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C₅H₁₀O₂
 Molecular Weight : 102.13 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2-Methylbutyric acid			
116-53-0	204-145-2	-	-

3. HAZARDS IDENTIFICATION**Emergency Overview**

Other hazards which do not result in classification
 Stench.

WHMIS Classification

B3 Combustible Liquid
 E Corrosive

HMIS Classification

Health Hazard: 3
 Flammability: 2
 Physical hazards: 0

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin Harmful if absorbed through skin. Causes skin burns.
Eyes Causes eye burns.
Ingestion Harmful if swallowed. Causes burns.

4. FIRST AID MEASURES

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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. Consult a physician.

In case of eye contact

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

If swallowed

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

5. FIRE-FIGHTING MEASURES**Flammable properties**

Flash point 74 °C (165 °F) - closed cup
 Ignition temperature no data available

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions**

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

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

Storage

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

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment**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).

Hand protection

Handle with gloves.

Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum).

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form liquid
 Colour colourless
 Odour Stench.

Safety data

pH no data available
 Melting point no data available
 Boiling point 176 - 177 °C (349 - 351 °F) - lit.
 Flash point 74 °C (165 °F) - closed cup
 Ignition temperature no data available
 Lower explosion limit no data available
 Upper explosion limit no data available
 Vapour pressure 0.7 hPa (0.5 mmHg) at 20 °C (68 °F)
 Density 0.936 g/mL at 25 °C (77 °F)
 Water solubility no data available
 Partition coefficient: log Pow: 1.18
 n-octanol/water

10. STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

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Materials to avoid

Bases, Oxidizing agents, Reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

LD50 Oral - rat - 1,750 mg/kg
 Remarks: Gastrointestinal:Changes in structure or function of salivary glands. Diarrhoea Other changes

LD50 Dermal - rabbit - 1,367 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.
 Behavioral:Ataxia. Gastrointestinal:Other changes.

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

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.

Signs and Symptoms of Exposure

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

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin Harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Ingestion Harmful if swallowed. Causes burns.

Additional information

RTECS: EK7897000

12. ECOLOGICAL INFORMATION**Elimination information (persistence and degradability)**

no data available

Ecotoxicity effects

no data available

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

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Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION**DOT (US)**

UN-Number: 3265 Class: 8 Packing group: III
 Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (2-Methylbutyric acid)
 Marine pollutant: No
 Poison Inhalation Hazard: No

IMDG

UN-Number: 3265 Class: 8 Packing group: III EMS-No: F-A, S-B
 Proper shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (2-Methylbutyric acid)
 Marine pollutant: No

IATA

UN-Number: 3265 Class: 8 Packing group: III
 Proper shipping name: Corrosive liquid, acidic, organic n.o.s. (2-Methylbutyric acid)

15. REGULATORY INFORMATION**DSL Status**

All components of this product are on the Canadian DSL list.

WHMIS Classification

B3 Combustible Liquid
 E Corrosive

16. OTHER INFORMATION**Further information**

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