

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Indole-3-butyric acid
 Product Number : I5386
 Brand : Sigma
 Company : Sigma-Aldrich Canada, Ltd
 2149 Winston Park Drive
 OAKVILLE ON L6H 6J8
 CANADA
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 4-(3-Indolyl)butanoic acid
 4-(3-Indolyl)butyric acid
 IBA
 Formula : C₁₂H₁₃NO₂
 Molecular Weight : 203.24 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
4-(Indol-3-yl)butyric acid			
133-32-4	205-101-5	-	-

3. HAZARDS IDENTIFICATION**WHMIS Classification**

D1B Toxic Material Causing Immediate and
 D2B Serious Toxic Effects
 Toxic by ingestion
 Moderate skin irritant
 Moderate respiratory irritant
 Moderate eye irritant

HMS Classification

Health Hazard: 2
 Flammability: 0
 Physical hazards: 0

Potential Health Effects

Inhalation : May be harmful if inhaled. Causes respiratory tract irritation.
Skin : May be harmful if absorbed through skin. Causes skin irritation.
Eyes : Causes eye irritation.
Ingestion : Toxic if swallowed.

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4. 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

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

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

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Flash point : no data available
 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 dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

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

Methods for cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE**Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

Keep in a dry place.

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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 particle respirator type N99 (US) or type P2 (EN 143) 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

Face shield and safety glasses

Skin and body protection

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

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form : powder
 Colour : beige

Safety data

pH : no data available
 Melting point : 124.0 - 125.5 °C (255.2 - 257.9 °F)
 Boiling point : no data available
 Flash point : no data available
 Ignition temperature : no data available
 Lower explosion limit : no data available
 Upper explosion limit : no data available
 Water solubility : no data available

10. STABILITY AND REACTIVITY**Storage stability**

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents, Strong bases

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

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Acute toxicity

LD50 Oral - mouse - 100 mg/kg

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.

Genotoxicity in vitro - Human - leukocyte
 Other mutation test systems

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation : May be harmful if inhaled. Causes respiratory tract irritation.
Skin : May be harmful if absorbed through skin. Causes skin irritation.
Eyes : Causes eye irritation.
Ingestion : Toxic if swallowed.

Additional Information

RTECS: NL5250000

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

no data available

Ecotoxicity effects

Toxicity to fish : LC50 - Oncorhynchus mykiss (rainbow trout) - > 90.5 mg/l - 96 h
 Toxicity to daphnia and other aquatic invertebrates : EC50 - Daphnia magna (Water flea) - 57 mg/l - 48 h

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS**Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

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DOT (US)

UN-Number: 2811 Class: 6.1 Packing group: III
 Proper shipping name: Toxic solids, organic, n.o.s. (4-(Indol-3-yl)butyric acid)
 Marine pollutant: No
 Poison Inhalation Hazard: No

IMDG

UN-Number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
 Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (4-(Indol-3-yl)butyric acid)
 Marine pollutant: No

IATA

UN-Number: 2811 Class: 6.1 Packing group: III
 Proper shipping name: Toxic solid, organic n.o.s. (4-(Indol-3-yl)butyric acid)

15. REGULATORY INFORMATION**DSL Status**

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

WHMIS Classification

D1B Toxic Material Causing Immediate and
 D2B Serious Toxic Effects
 Toxic by ingestion
 Moderate skin irritant
 Moderate respiratory irritant
 Moderate eye irritant

16. OTHER INFORMATION**Further information**

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