

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Indole-3-butyric acid

Other means of identification

Product Code(s) A4170

Synonyms No information available

Product Use For Laboratory Research Use Only.

Supplier/Manufacturer

Biomatik Corporation
9-140 McGovern Dr.
Cambridge, Ontario N3H 4R7
Canada

Telephone Number 1-519-489-7195

E-mail Address info@biomatik.com

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------|--------------|
| Acute Toxicity - Oral | Category 3 |
| Skin irritation | Category 2 |
| Eye irritation | Category 2 A |

Label elements

Emergency Overview

Danger

Hazard statements

H301 - Toxic if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation



Appearance Beige

Physical State Powder

Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Name | CAS-No | EC No. | Weight % | Trade Secret |
|-----------------------|----------|-----------|----------|----------------|
| Indole-3-butyric acid | 133-32-4 | 205-101-5 | 95-100 | Not applicable |

4. FIRST AID MEASURES**First Aid Measures**

| | |
|---------------------|--|
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. |
| Ingestion | Never give anything by mouth to an unconscious person. Rinse mouth. |

Most important symptoms and effects, both acute and delayed**Most Important Symptoms/Effects** No information available.**Indication of any immediate medical attention and special treatment needed****Notes to Physician** Treat symptomatically.**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

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

Unsuitable Extinguishing Media No information available.**Specific Hazards Arising from the Chemical**

No information available.

Hazardous Combustion Products Carbon oxides. Nitrogen oxides (NOx).**Explosion Data****Sensitivity to Mechanical Impact** None.**Sensitivity to Static Discharge** None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products No information.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------|-----------|----------|------------|
| Indole-3-butyric acid | - | - | - |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-------------------------------------|--------------------------|--------------------------------|--------------------------|
| Physical State | Solid | Odor | No information available |
| Appearance | Powder | Odor Threshold | No information available |
| Color | Beige | | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> | |
| pH | No information available | | |
| Melting point/freezing point | 125.5 °C | | |
| Boiling Point/Range | No information available | | |
| Flash Point (High in °C) | No information available | | |
| Evaporation Rate | No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | No information available | | |
| Lower flammability limit: | No information available | | |
| Vapor pressure | No information available | | |
| Vapor Density | No information available | | |
| Specific Gravity | No information available | | |
| Water Solubility | No information available | | |
| Solubility in other solvents | No information available | | |
| Partition coefficient | No information available | | |
| Autoignition Temperature | No information available | | |
| Decomposition Temperature | No information available | | |
| Kinematic viscosity | No information available | | |
| Dynamic viscosity | No information available | | |
| Explosive Properties | No information available | | |
| Oxidizing Properties | No information available | | |

Other Information

| | |
|-------------------------|--------------------------|
| Softening Point | No information available |
| Molecular Weight | No information available |
| VOC Content | No information available |
| Density | No information available |
| Bulk Density | No information available |

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical Stability

May form explosive peroxides.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Phosgene.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | There is no data available for this product. |
| Eye Contact | There is no data available for this product. |
| Skin Contact | There is no data available for this product. |
| Ingestion | There is no data available for this product. |

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------|------------------|-------------|-----------------|
| Indole-3-butyric acid | 100mg/kg (mouse) | - | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic Effects No information available.
Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-----------------------|-------|------|-----|------|
| Indole-3-butyric acid | - | - | - | - |

Reproductive Toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Target Organ Effects No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Toxicity to Fish | Crustacea |
|-----------------------|----------------------|--|-----------|
| Indole-3-butyric acid | - | LC50 - Oncorhynchus mykiss (rainbow trout) - > 90.5 mg/l | - |

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|-----------------------|-----------------------|
| Indole-3-butyric acid | - |

Other Adverse Effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging Do not re-use empty containers.

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|-----------------------|------|--------------------------|------------------------|------------------------|
| Indole-3-butyric acid | - | - | - | - |

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|-----------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Indole-3-butyric acid | - | - | - | - |

| Chemical Name | California Hazardous Waste Status |
|-----------------------|-----------------------------------|
| Indole-3-butyric acid | - |

14. TRANSPORT INFORMATION**DOT**

UN/ID no. 2811
Proper shipping name Toxic solids, organic, n.o.s. (4-(Indol-3-yl)butyric acid)
Hazard Class 6.1
Packing Group III

IATA

UN/ID no. 2811
Proper shipping name Toxic solid, organic, n.o.s. (4-(Indol-3-yl)butyric acid)
Hazard Class 6.1
Packing Group III

15. REGULATORY INFORMATION**WHMIS Classification**

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

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations

16. OTHER INFORMATION**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet

