SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION- - - - - - -

Product Name: Indole-3 butyric acid (IBA)
Product Code(s): IB0725
Recommended Use: For Laboratory Use Only
Not for Human or Animal Drug Use

SECTION 2. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -

Emergency Overview

WHMIS Classification
D1B Toxic Material Causing Immediate and Serious Toxic Effects
D2B Toxic Material Causing Other Toxic Effects

GHS Classification
Acute toxicity, Oral (Category 3)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 3)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram
Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,
If present and easy to do. Continue rinsing.

HMIS 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.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EC No.</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indole-3 butyric acid (IBA)</td>
<td>200-795-6</td>
<td>133-32-4</td>
<td>95-100</td>
</tr>
</tbody>
</table>

### SECTION 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. Take victim immediately to hospital. 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.

### SECTION 5. FIRE FIGHTING MEASURES

- **Conditions of flammability**: Not flammable or combustible.
- **Suitable extinguishing media**: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Special protective equipment for firefighters**: Wear self contained breathing apparatus for fire fighting if necessary.
- **Hazardous combustion products**: Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)
- **Explosion data - sensitivity to mechanical impact**: no data available
- **Explosion data - sensitivity to static discharge**: no data available

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions**: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7. - - - - - - - HANDLING AND STORAGE- - - - - - -

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Keep in a dry place.

SECTION 8. - - - - EXPOSURE CONTROLS/PERSOAL PROTECTION- - - -

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. 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.

Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and 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.

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

Specific engineering controls
Use mechanical exhaust or laboratory fumehood to avoid exposure.

SECTION 9. - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - -

Appearance
Form powder
Colour beige

Safety data
pH no data available
Melting Melting point/range: 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
Auto-ignition       no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure     no data available
Density             no data available
Water solubility    no data available
Partition coefficient: no data available
n-octanol/water     no data available
Relative vapour     no data available
density             no data available
Odour               no data available
Odour Threshold     no data available
Evaporation rate    no data available

SECTION 10. - - - - - - STABILITY AND REACTIVITY - - - - - -

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions no data available

Condition s to avoid no data available

Materials to avoid
Strong oxidizing agents, Strong bases

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx) Other decomposition products - no data available

SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - -

Acute toxicity

Oral LD50
LD50 Oral - mouse - 100 mg/kg

Inhalation LC50

Dermal LD50
no data available

Other information on 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

**Germ cell mutagenicity**
Genotoxicity in vitro - Human - leukocyte
Other mutation test systems

**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.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**Reproductive toxicity**
no data available

**Teratogenicity**
no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
no data available

**Aspiration hazard**
no data available

**Potential health effects**

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May be harmful if inhaled. Causes respiratory tract irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Toxic if swallowed.</td>
</tr>
<tr>
<td>Skin</td>
<td>May be harmful if absorbed through skin. Causes skin irritation.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes eye irritation.</td>
</tr>
</tbody>
</table>

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

**Synergistic effects**
no data available

**Additional Information**
RTECS: NL5250000

**SECTION 12. - - - - - - - ECOLOGICAL INFORMATION - - - - - - -**

**Toxicity**

<table>
<thead>
<tr>
<th>Route</th>
<th>Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>To fish</td>
<td>LC50 - Oncorhynchus mykiss (rainbow trout) - &gt; 90.5 mg/l - 96 h</td>
</tr>
<tr>
<td>To daphnia and other aquatic invertebrates</td>
<td>EC50 - Daphnia magna (Water flea) - 57 mg/l - 48 h</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
no data available

**Bioaccumulative potential**
no data available
Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.
no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. 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.

SECTION 14. TRANSPORT INFORMATION

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)

SECTION 15. REGULATORY INFORMATION

WHMIS Classification
D1B Toxic Material Causing Immediate and Serious Toxic Effects
D2B Toxic Material Causing Other Toxic Effects

Toxic by ingestion
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.

SECTION 16. OTHER INFORMATION

Issuing Date 13-Aug-2009
Revision Date 30-Aug-2016
Revision Note
No information available.

Recommended Restrictions
No information available

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 MSDS