

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 4

Revision: 03.05.2018

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

- **1.1 Product identifier**
- **Trade name:** Indole-3-butyric acid
- **Article number:** 26172
- **CAS Number:**  
133-32-4
- **EC number:**  
205-101-5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
SERVA Electrophoresis GmbH  
Carl-Benz-Str. 7  
D-69115 Heidelberg  
Tel.: +49 6221 13840-0  
FAX: +49 6221 13840-10  
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4 Emergency telephone number:**  
Medical Emergency Information in case of poisoning:  
Poison Information Center Mainz - Phone: +49 (0) 6131 19240  
(advisory service in German or English language)



**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS06

Acute Tox. 3 H301 Toxic if swallowed.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS06
- **Signal word** Danger
- **Hazard statements**  
H301 Toxic if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.
- **Precautionary statements**  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)

GB

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Revision: 03.05.2018

**Trade name: Indole-3-butyric acid**

(Contd. of page 1)

P264 Wash thoroughly after handling.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.

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

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description:**  
133-32-4 4-(indol-3-yl)butyric acid
- **Identification number(s):**
- **EC number:** 205-101-5
- **Description:**
- **Empirical formula:** C<sub>12</sub>H<sub>13</sub>N O<sub>2</sub>
- **MW:** 203.24

**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **General information** Remove contaminated clothing.
- **After inhalation**  
Supply fresh air.  
Call a doctor immediately.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be formed, but not limited to:  
Nitrogen oxides (NOx)  
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Pick up mechanically.

(Contd. on page 3)

**Safety data sheet**  
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Version number 4

Revision: 03.05.2018

**Trade name: Indole-3-butyric acid**

(Contd. of page 2)

*Dispose contaminated material as waste according to item 13.*

*Ensure adequate ventilation.*

**· 6.4 Reference to other sections**

*See Section 7 for information on safe handling*

*See Section 8 for information on personal protection equipment.*

*See Section 13 for disposal information.*

**SECTION 7: Handling and storage**

**· 7.1 Precautions for safe handling**

*Ensure good ventilation/exhaustion at the workplace.*

*Open and handle receptacle with care.*

*Prevent formation of dust.*

**· Information about protection against explosions and fires:** *Keep respiratory protective device available.*

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

**· Storage**

**· Requirements to be met by storerooms and receptacles:** *Store at +2 to +8 °C*

**· Information about storage in one common storage facility:** *Store away from oxidising agents.*

**· Further information about storage conditions:**

*Store under lock and key and with access restricted to technical experts or their assistants only.*

*Keep receptacle tightly sealed.*

*Store receptacle in a well ventilated area.*

*Protect from exposure to the light.*

**· 7.3 Specific end use(s)** *No further relevant information available.*

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

**· Additional information about design of technical systems:** *No further data; see item 7.*

**· 8.1 Control parameters**

**· Components with limit values that require monitoring at the workplace:** *Not required.*

**· Additional information:** *The lists that were valid during the creation were used as basis.*

**· 8.2 Exposure controls**

**· Personal protective equipment**

**· General protective and hygienic measures**

*Keep away from foodstuffs, beverages and feed.*

*Immediately remove all soiled and contaminated clothing*

*Wash hands before breaks and at the end of work.*

*Store protective clothing separately.*

**· Breathing equipment:**

*Short term filter device:*

*Filter P3.*

**· Protection of hands:**

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

**· Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

**· Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 4

Revision: 03.05.2018

Trade name: *Indole-3-butyric acid*

(Contd. of page 3)

- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**  
Natural rubber, NR  
Nitrile rubber, NBR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

Form:	Crystalline powder
Colour:	Beige
Odour:	Odourless

##### · Change in condition

Melting point/freezing point:	121 - 125 °C
Initial boiling point and boiling range:	undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Product is not flammable.

· **Explosive properties:** Product does not present an explosion hazard.

· **Density:** Not determined

· **Bulk density at 20 °C:** ca. 360 kg/m<sup>3</sup>

##### · Solubility in / Miscibility with

Water:	Insoluble
Alcohols:	Readily soluble
· 9.2 Other information	There are no more data available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant informations available
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No further relevant informations available.
- **10.4 Conditions to avoid** exposure to the light
- **10.5 Incompatible materials:** Avoid contact with: strong oxidizers, strong acids, strong alkali
- **10.6 Hazardous decomposition products:**  
Nitrogen oxides  
Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

#### · 11.1 Information on toxicological effects

· **Acute toxicity**  
Toxic if swallowed.

##### · LD/LC50 values that are relevant for classification:

Oral	LD50	100 mg/kg (Maus)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.

(Contd. on page 5)

**Safety data sheet**  
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Version number 4

Revision: 03.05.2018

**Trade name: Indole-3-butyric acid**

(Contd. of page 4)

- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Acute effects (acute toxicity, irritation and corrosivity)** Respiratory irritation is possible.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**  
May cause respiratory irritation.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |                                       |  |
|---------------------------------------|--|
| · <b>14.1 UN-Number</b>               |  |
| · <b>ADR, IMDG, IATA</b>              | UN2811   |
| · <b>14.2 UN proper shipping name</b> |  |
| · <b>ADR</b>                          | 2811 TOXIC SOLID, ORGANIC, N.O.S. (4-(indol-3-yl)butyric acid) |
| · <b>IMDG</b>                         | TOXIC SOLID, ORGANIC, N.O.S. (4-(indol-3-yl)butyric acid)      |
| · <b>IATA</b>                         | Toxic solid, organic, n.o.s. (4-(Indol-3-yl)butyric acid)      |

(Contd. on page 6)

GB

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**Trade name: Indole-3-butyric acid**

(Contd. of page 5)

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 6.1 Toxic substances.  
· **Label** 6.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

· **Danger code (Kemler):** Warning: Toxic substances.  
60

· **EMS Number:** F-A,S-A

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 5 kg

· **Transport category** 2

· **Tunnel restriction code** E

· **UN "Model Regulation":** UN2811, TOXIC SOLID, ORGANIC, N.O.S., 6.1, III

**SECTION 15: Regulatory information**

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
I	80-100

· **Water hazard class:** Water hazard class I (Self-assessment): slightly hazardous for water.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department

· **Contact:** +49 6221 13840-35

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

PBT: persistent, bioaccumulative, toxic substance (REACH)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

(Contd. on page 7)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

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**Trade name: Indole-3-butyric acid**

(Contd. of page 6)

IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 3: Acute toxicity – Category 3  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **\* Data compared to the previous version altered.**

GB