

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 1 Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Identification of the product : Raw material  
Product code : 5ALA01, 5ALA05, 5ALA10  
Trade name : 5-Aminolevulinic acid hydrochloride  
CAS number : 5451-09-2  
Synonyms : 5-Amino-4-oxopentanoic acid hydrochloride  
Molecular Formula : C5H9NO3 . HCl  
Molecular weight : 167.59 g/mol

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

1.2.1 Relevant identified uses : For research purposes only  
1.2.2 Uses advised against : No additional information available

**1.3. Details of the supplier of the safety data sheet**

Company identification : Formedium Ltd.  
King's Lynn, England, PE31 6DJ  
Tel: +44(0)1485 609069  
Web: [www.formedium.com](http://www.formedium.com)  
E-mail: [info@formedium.com](mailto:info@formedium.com)

**1.4. Emergency telephone number**

Emergency telephone number : Tel: +44(0)1485 609069 (local time : 9.00 to 17.00)  
National Poison Information Centre :Europe UK : +44 0845 4647 (this service is only available to health professionals)  
See [www.toxbase.org](http://www.toxbase.org) for a local poison centre

**SECTION 2 Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Not regulated

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008**

Hazards pictograms code : None  
Precautionary statements : None

**2.3. Other hazards**

None under normal conditions.

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 3 Composition/information on ingredients****Components** : This product is not classified as hazardous.

Substance name:	Contents	CAS No.	EC No.
5-Aminolevulinic Acid HCl	>= 98%	5451-09-2	226-679-5

No components need to be disclosed according to the applicable regulations.

**SECTION 4 First aid measures****4.1. Description of first aid measures**

**Inhalation** : If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**Skin contact** : Wash off with soap and plenty of water.

**Eye contact** : Flush eyes with water as a precaution.

**Ingestion** : Never give anything by mouth to an unconscious person.  
Rinse mouth with water.

**4.2. Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and / or in section 11.

**4.3. Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5 Fire-fighting measures****5.1. Extinguishing media****Suitable extinguishing media** : Water spray, alcohol-resistant foam, dry chemical or Carbon Dioxide.**5.2. Special hazards arising from the substance or mixture**

No data available.

**5.3. Advice for firefighters****Special protective equipment for fire-fighters** : Wear self-contained breathing apparatus for fire fighting if necessary.**5.4. Further information**

No data available.

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 6 Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8.

**6.2. Environmental precautions**

No special environmental precautions required.

**6.3. Methods and material for containment and cleaning up**

Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4. Reference to other sections**

For disposal see section 13.

**SECTION 7 Handling and storage****7.1. Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2

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

**Storage area and containers** : Store in a dry, cool area.  
Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature : -20°C

**7.3. Specific end use(s)**

**Specific end use(s)** : For research purposes only

**SECTION 8 Exposure controls/personal protection****8.1. Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**8.2. Exposure controls**

General industrial hygiene practice.

**Personal protective equipment****Skin 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standards EN 374 derived from it.

**Body protection**

Choose body protection in relation to its type, the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Do not let product enter drains.

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 9 Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Form</b>	: Crystalline
<b>Colour</b>	: White.
<b>Odour</b>	: Odourless
<b>Odour threshold</b>	: No data available
<b>Flash point (°C)</b>	: No data available
<b>Solubility in water</b>	: 50 g/l
<b>Relative Density</b>	: No data available
<b>Vapour density (air = 1)</b>	: No data available
<b>Vapour pressure</b>	: No data available
<b>Melting point / Freezing point</b>	: 150°C – decomposes on heating
<b>Boiling point (°C)</b>	: No data available.
<b>Partition coefficient: n-octanol / water</b>	: log Pow : not determined
<b>pH</b>	: No data available
<b>Evaporation rate</b>	: No data available
<b>Flammability (solid, gas)</b>	: Not classified as flammable
<b>Viscosity</b>	: No data available
<b>Auto ignition temperature (°C)</b>	: Not classified as self heating
<b>Decomposition temperature</b>	: No data available
<b>Oxidising properties</b>	: Not classified as oxidizing
<b>Explosive properties</b>	: Not classified as explosive

**9.2. Other information**Bulk Density : 400 kg/m<sup>3</sup>

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 10 Stability and reactivity****10.1. Reactivity**

No data available.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid**

No data available.

**10.5. Incompatible materials to avoid**

Strong oxidizing agents.

**10.6. Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.

**SECTION 11 Toxicological information****11.1. Information on toxicological effects**

**Acute oral 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** : No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% as identified as probable, possible or Confirmed human carcinogen by IARC.

**Reproductive toxicity** : No data available

**Specific target organ toxicity – single exposure** : No data available

**Specific target organ toxicity – repeated exposure** : No data available

**Aspiration hazard** : No data available

**Additional information** : RTECS : Not available

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

**11.2. Additional Information****Endocrine disrupting properties :**

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 12 Ecological information****12.1. Toxicity**

No data available.

**12.2. Persistence and degradability**

No additional information available.

**12.3. Bioaccumulative potential**

No additional information available.

**12.4. Mobility in soil**

No additional information available.

**12.5. Results of PBT and vPvB assessment**

This substance / mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6. Other adverse effects**

No data available.

**12.7. Endocrine disrupting properties**

The Substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**SECTION 13 Disposal considerations****13.1. Waste treatment methods**

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

Contaminated Packaging: Dispose of as unused product.

**SECTION 14 Transport information****14.1. UN Number**

Not applicable : Not classified as dangerous in the meaning of transport regulations.

**General information****14.2. UN Proper shipping name**

Not applicable.

**14.3. Transport Hazard Class(es)**

Not applicable.

**14.4. Packing group**

Not applicable.

**14.5. Environmental hazards**

Not applicable.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**5-AMINOLEVULINIC ACID HYDROCHLORIDE****5ALA****SECTION 15 Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EU) No. 2015/830.

**15.2. Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16 Other information****Further information**

: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Formedium Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.

**Revision**

: Complete SDS revision

**End of document**