

## Material Safety Data Sheet of Beta-Alanine

### SECTION 1: Chemical Product and Company Identification

#### 1.1 Product identifiers

**Product name:** Beta-Alanine

**CAS-No.:** 107-95-9

**Company Identification :**Huarui Biotechnology (Chuzhou) Co., Ltd.

**ADD:** No.236 Wenzhong Road, Zhongxin Suchu High-tech Industrial Development Zone, Chuzhou City, Anhui Province, China

**TEL:**+ 86-0550-3068008

### SECTION 2: Composition/information on ingredients

#### 2.1 Substances

**MSDS Name:** Beta-Alanine

**Synonyms:** BETA-AMINO-PROPIONIC ACID

**Formula:** C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>

**Molecular weight:** 89,09 g/mol

#### 2.2 Information on ingredients

CAS NO.	Chemical name	Weight %	EINECS NO.
107-95-9	Beta-Alanine	100%	203-536-5

### SECTION 3: Hazards summarizing

#### 3.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

#### 3.2 Label elements

Not a hazardous substance or mixture.

#### 3.3 Other hazards

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.

## **SECTION 4: First-aid measures**

### **4.1 Description of first aid measures**

#### **If inhaled**

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

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

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**

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

### **5.2 Special hazards arising from the substance or mixture:**

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **5.4 Further information**

No data available

## **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 materials 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**

Store in tight containers at controlled room temperature.

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

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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

### **8.1 Control parameters**

Components with workplace control parameters

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

General industrial hygiene practice.

#### **Personal protective equipment**

##### **Eye/face protection**

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

##### **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 Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., 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 dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

No special environmental precautions required.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	White crystals or crystalline powder
b) Odour	No abnormal smell
c) Odour Threshold	No data available
d) pH	6.5~7.5
e) Melting point	197~202 °C.
f) Boiling point	237.1 ± 23.0 ° C(Predicted)
g) Flash point	204-206°C
h) Evaporation rate	No data available
i) Flammability (solid,gas)	No data available
j) Upper/lower flammability or	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	0.70-0.85 g/cm <sup>3</sup>
n) Solubility	Soluble in water(550g/L); Slightly soluble in alcohol. Insoluble in ether and acetone.
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### 9.2 Other safety information

No data available

## 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 data available

#### **10.4 Conditions to avoid**

No data available

#### **10.5 Incompatible materials**

Strong oxidizing agents

#### **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides,

Nitrogen oxides (NO<sub>x</sub>)

Other decomposition products - No data available

In the event of fire: see section 5

### **SECTION 11: Toxicological information**

#### **11.1 Information on toxicological effects**

##### **Acute toxicity**

LD<sub>50</sub> Oral - Rat - male and female - > 5.000 mg/kg

##### **Skin corrosion/irritation**

Skin - Rabbit

Result: No skin irritation

(OECD Test Guideline 404)

##### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

##### **Respiratory or skin sensitisation**

in vivo assay - Mouse

Did not cause sensitisation on laboratory animals.

(OECD Test Guideline 429)

##### **Germ cell mutagenicity**

in vitro assay

S. typhimurium

Result: negative

##### **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.

**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**

Repeated dose toxicity - Rat - male and female - Gavage - No observed adverse effect level - 1.000 mg/kg

RTECS: Not available

This substance is a cholinoreceptor antagonist at the neuromuscular junction. This substance possesses curare-like properties and should be handled with extreme care.

**SECTION 12: Ecological information**

**12.1 Ecotoxicity: Not available.**

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data 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

### **SECTION 13: Disposal**

#### **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 DOT Classification: Not a DOT controlled material (United States).**

**According to the latest revised IMO IMDG CODE, the product is not dangerous.**

**Identification: Not applicable.**

**Special Provisions for Transport: Not applicable.**

### **SECTION 15: Regulatory information**

**15.1 Federal and State Regulations: TSCA 8(b) inventory: Beta-Alanine**

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC): R22- Harmful if swallowed.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0



Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

### **15.2 Chemical safety assessment**

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

### **SECTION 16: Other information**

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages. (Date: Oct. 16, 2023)