

## Material Safety Data Sheet

### 1. **Identification of substance:**

- Product details: N-Acetyl-L-Cysteine
- Trade name: N-Acetyl-L-Cysteine
- Manufacturer/Supplier: Shaanxi Lifewe Bioengineering Co., Ltd.
- Information department: Technical Department

### 2. **Composition/Data on components:**

- Chemical characterization: natural product
- Description: White Crystalline powder
- Dangerous components: no.

### 3. **Hazards identification**

- Hazard description: not applicable
- Information pertaining to particular dangers for man and environment: not applicable
- Classification system: The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

### 4. **First aid measures**

- General information: no special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: if symptoms persist consult doctor.

### 5. **Fire fighting measures**

- Suitable extinguishing agents: CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray of alcohol resistant foam.
- Protective equipment: No special measures required.

### 6. **Accidental release measures**

- Measures for environmental protection: No special measures required.
- Measures for cleaning/collection: Pick up mechanically avoiding causing a stir.
- Additional information: No dangerous substances are released.

### 7. **Handling and storage**

- Information for safe handling: No any effect.
- Information about protection against explosions and firms: No special measures required.
- Storage: requirements to be met by storerooms and receptacles: Keep container dry.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Storage class: no special requirement.

### 8. **Exposure controls and personal protection**

- Additional information about design of technical systems: No further data; see item 7.
- Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Addition information:

The lists that were valid during the creation were used as basis.

- Personal protective equipment: no requirement.
- Breathing equipment: Not required.
- Protection of hands: Not required.
- Eye protection: Not required.

**9. Physical and chemical properties:**

- Form: fine powder
- Odor: characteristic
- Moisture: not more than 8%

**10. Stability and reactivity**

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Dangerous reactions: No dangerous reactions known.
- Dangerous products of decomposition:  
No dangerous decomposition products known.

**11. Toxicological information**

- Acute toxicity: none
- Primary irritant effect: none
- On the skin: no irritant effect on the skin. The inhalation of powder can irritate the respiratory tract.
- On the eye: No irritant effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines of preparations as issued in the latest version: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

**12. Ecological information:**

- General notes: No hazardous to water.

**13. Disposal Considerations**

- Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**14. Transport information:**

- ADR/RID class: Not applicable

**15. Other Regulatory Information**

- Federal and State Regulation: No products were found.
- Other Regulations: Not available
- Other Classifications:
- WHMIS (Canada): Not controlled under WHMIS (Canada)
- DSCL (EEC):R36-Irritating to eye/S2-keep out of the reach of children./S46-If swallowed, seek medical advice/Immediately and show this container or label.
- HMIS (U.S.A.):Health Hazard: 1/Fire Hazard: 1/Reactivity: 0/Personal Protection: E
- National Fire Protection Association (U.S.A.): Health: 1/Flammability:1/Reactivity: 0
- Protective Equipment: Gloves/Lab coat/Dust respirator/Be sure to use an Approved/certified respirator of Equivalent/Safety glasses

**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 MSDS: Shaanxi Lifewe Bioengineering Co., Ltd.
- Contact: Ms.Qiaoli Zhai

Date: Feb 1st 2024

Shaanxi Lifewe Bioengineering Co., Ltd.