



MATERIAL SAFETY DATA SHEET

Stearic Acid

Product name: Stearic Acid
Other name: Octadecanoic Acid
Chemical formula: $C_{18}H_{36}O_2$
CAS number: 57-11-4
EC number: 200-313-4
Molecular weight: 284.48 g/mol
Supplier: Basekim Company

1. Hazard Identification

Stearic acid is generally **not classified as hazardous** under normal GHS/CLP criteria.

Important hazards:

- Dust may irritate the eyes and respiratory tract.
- Hot or molten material may cause thermal burns.
- Fine dust may form combustible concentrations in air.
- The product is combustible when exposed to sufficient heat.

Signal word: Not required

Hazard pictogram: Not required

2. Composition

Component	CAS Number	Content
Stearic Acid	57-11-4	Grade-dependent

Commercial stearic acid may contain palmitic acid and other fatty acids.

3. First-Aid Measures

Inhalation: Move the person to fresh air. Seek medical attention if irritation continues.

Eye contact: Rinse carefully with clean water for at least 15 minutes.

Skin contact: Wash with soap and water.



Molten product: Cool the affected area with running water. Do not remove material stuck to the skin. Obtain medical attention.

Ingestion: Rinse the mouth. Do not induce vomiting. Seek medical advice if symptoms occur.

4. Firefighting Measures

Use:

- Water spray
- Foam
- Dry chemical powder
- Carbon dioxide

Burning may produce carbon monoxide, carbon dioxide, smoke and irritating fumes.

Firefighters should wear protective clothing and breathing equipment.

5. Accidental Release

- Avoid creating or breathing dust.
- Remove ignition sources.
- Sweep or vacuum into a suitable container.
- Clean the floor to prevent slipping.
- Prevent entry into drains and waterways.

6. Handling and Storage

- Handle in a ventilated area.
- Avoid dust formation.
- Keep away from flames, sparks and excessive heat.
- Store in sealed packaging in a cool, dry place.
- Protect from moisture and direct sunlight.
- Keep away from strong oxidising agents.

7. Personal Protection

Eyes: Safety glasses or goggles.

Hands: Protective gloves. Use heat-resistant gloves for hot material.



Respiratory protection: Use a suitable dust respirator when ventilation is insufficient.

Body: Protective clothing and closed footwear.

8. Physical and Chemical Properties

Property	Typical Information
Appearance	White flakes, beads or powder
Odour	Mild fatty or tallow-like odour
Melting point	Approximately 67–70°C
Density	Approximately 0.94 g/cm ³
Water solubility	Practically insoluble
Flammability	Combustible solid
Molecular weight	284.48 g/mol

9. Stability and Reactivity

Stable under normal storage conditions.

Avoid excessive heat, flames, dust accumulation and strong oxidising agents.

Thermal decomposition may produce carbon monoxide, carbon dioxide and irritating fumes.

10. Toxicological Information

Stearic acid has low acute toxicity.

Dust or direct contact may cause mild:

- Eye irritation
- Skin irritation
- Coughing
- Respiratory discomfort
- Gastrointestinal discomfort if swallowed

11. Environmental Information

The product is not expected to be highly hazardous to aquatic organisms.



Avoid uncontrolled release into soil, drains and waterways.

12. Disposal

Reuse or recycle uncontaminated material where possible.

Dispose of waste and packaging through an authorised waste contractor according to local regulations.

13. Transport Information

Stearic acid is generally not regulated as dangerous goods for road, sea or air transport.

UN number: Not assigned

Transport class: Not regulated

Packing group: Not assigned

14. Important Notice

This is a general MSDS draft. Final purity, composition, emergency contact information and regulatory classification must be confirmed using the current manufacturer SDS and Certificate of Analysis.