



TECHNICAL DATA SHEET

Stearic Acid

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

Product Description

Stearic Acid is a saturated long-chain fatty acid derived from vegetable oils or animal fats. It is supplied as white flakes, beads or powder and is used as an emulsifier, thickener, lubricant, stabiliser and processing aid.

Typical Specification

Parameter	Typical Value
Appearance	White flakes, beads or powder
Stearic acid content	Grade-dependent
Acid value	Approximately 195–210 mg KOH/g
Saponification value	Approximately 196–211 mg KOH/g
Iodine value	Grade-dependent
Melting point	Approximately 52–70°C
Moisture	Typically 0.2% maximum
Colour	White to off-white
Odour	Mild characteristic odour
Water solubility	Practically insoluble

Final values depend on whether the product is single-, double- or triple-pressed and on its technical, cosmetic or pharmaceutical grade.

Available Grades

- Technical grade
- Cosmetic grade



- Pharmaceutical grade
- Vegetable-derived grade
- Animal-derived grade

Food, cosmetic or pharmaceutical applications require the appropriate certified grade.

Main Applications

- Cosmetics, creams and lotions
- Soap and detergent production
- Candle manufacturing
- Rubber processing and vulcanisation
- PVC and plastic stabilisation
- Lubricants and metalworking
- Pharmaceutical tablets
- Paints, coatings and polishes
- Metallic stearate production

Main Features

- Good emulsifying and thickening performance
- Improves product hardness and consistency
- Good lubricating properties
- Stable under normal processing conditions
- Compatible with many organic and inorganic materials
- Available in several grades and physical forms

Packaging

Common packaging may include:

- 25 kg bags
- Jumbo bags
- Drums
- Custom bulk packaging

Packaging availability should be confirmed with the supplier.

Storage

- Store in a cool, dry and ventilated place.



- Keep packaging sealed.
- Protect from moisture and direct sunlight.
- Keep away from flames, excessive heat and oxidising agents.
- Recommended storage temperature: below 30°C.

Shelf Life

Recommended shelf life: **up to 24 months** in unopened original packaging under suitable storage conditions.

Disclaimer

The listed values are typical and are not guaranteed specifications. Actual composition, fatty-acid profile, acid value, iodine value and melting point vary by grade and source. Refer to the current Certificate of Analysis for confirmed batch specifications.