



Chemistry for Safer, Sustainable Life

Sodium stearate SAFETY DATA SHEET

Section 1: Identification

Product Name: Sodium stearate

CAS Synonym: Octadecanoic (stearic) acid sodium salt, sodium octadecanoate, soap

CAS: 822-16-2

Molecular Formula: C₁₈H₃₅NaO₂

Molecular weight: 306.46g/mol

Product ID: 100STEA13

Potential Uses: plastics stabilizer, anionic emulsifier, viscosity modifier, gelling agent, waterproofing agent, dispersant, etc.

Product Supplier: BioFuran Materials LLC
920 William Pitt Way, Pittsburgh, PA 15238

In an emergency or for information about this SDS, call: 412-376-7101

Section 2: GHS Hazard(s) Identification

Hazard Classification: Considered hazardous under the 2012 OSHA Hazard Communication Standard
Skin corrosion / irritation – Category 2
Serious eye irritation / damage – Category 2

Hazard Statements: May cause skin irritation, H315
May cause serious eye irritation, H319
May form combustible dust in air, H500

Signal Word (s): Warning

Pictograms:



Precautionary Statements: P262 – If in eyes, rinse thoroughly with water for several minutes. Wear eye protection / face protection
P264 – Wash hands thoroughly after handling
P280 – Wear protective gloves / protective clothing, eye protection / face protection
P302+P352 – If on skin, wash with plenty of soap and water
P305+P351+P338 – If in eyes, rinse thoroughly with water for several minutes. Remove contact lenses if present. Continue rinsing for several minutes.
P337+P313 – If eye irritation persists, get medical advice/attention
P403+P233 – Store in a well-ventilated space. Keep containers tightly closed.

Description of other hazards: No other hazards

Section 3: Composition/ Information on Ingredients

Chemical Name	Synonym	CAS#	Conc.
Sodium stearate	Octadecanoic acid sodium salt	822-16-2	98-100%

Section 4: First-Aid Measures

After skin contact: Wash off with soap and plenty of water. Consult a physician.

After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

Consult a physician.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Consult a physician.

Section 5: Fire-Fighting Measures

Fire hazards: Burning of substance in fire releases toxic gases. In case of a fire, wear self-contained breathing apparatus as combustion may produce hazardous fumes.

Suitable extinguishing agents: Use water spray, sand, dolomite, dry chemical or carbon dioxide.

Special protective equipment for firefighters: Do not enter fire area without proper protective equipment, including respiratory protection. Avoid contact with skin and eyes. Do not breathe dust.

Section 6: Accidental Release Measures

Personal precautions: Wear protective equipment and avoid inhalation of fumes as well as eye and/or skin contact.

Measures for environmental protection: Do not dispose product or its residues in municipal sewers or drains. Notify authorities if product enters sewers or public waters.

Measures for cleaning/collecting: Pick up and arrange disposal without creating splashes or fumes. Mop up any spillages and keep all product wastes and residues in suitable, closed containers for proper disposal.

Section 7: Handling and Storage

Handling: Keep away from heat, sparks, and open flames. Do not use substance in confined spaces without adequate ventilation. Avoid contact with skin and eyes. Use a respirator when working in poorly ventilated spaces.

Storage: Keep container tightly closed in a dry, well ventilated area.

Section 8: Exposure Controls/Personal Protection

Protection of hands: Neoprene or nitrile rubber gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact. Dispose used gloves after use in line with good laboratory practices.

Body protection: Wear chemical resistant aprons, coveralls, or lab coats.

Eye protection: Chemical goggles with side shields conforming to NIOSH (US). Contact lenses should not be worn.

General protective and hygienic measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Breathing equipment: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified P95 respirator is recommended.

Section 9: Physical and Chemical Properties

Form: White flaky powder

Odor: tallow-like odor

pH: No data available

Melting point/melting range: 255-265°C

Boiling point/boiling range: no data available

Flash point: no data available

Vapor pressure: No data available

Solubility in/Miscibility with water: dissolve slowly in cold water, soluble in hot water

Viscosity: no data available

Surface tension: no data available

Relative density: no data available

Section 10: Stability and Reactivity

Reactivity: No particular reactivity concerns

Chemical stability: Stable under ambient conditions

Conditions to avoid: Avoid high heat, sparks, and flames

Incompatible materials: Hydroxides, soluble carbonates, strong oxidizing agents, sulfuric acid

Hazardous decomposition products: Oxides of carbon (CO_x)

Section 11: Toxicological Information

Acute toxicity: LD50 oral, rat > 5000mg/kg

Potential routes of exposure/potential health effects

Skin: May cause skin irritation

Eye: May cause eye irritation

Inhalation: no data available

Ingestion: No data available

Carcinogenic effects: No data available

Mutagenic effects: No data available

Reproductive toxicity: No data available

Sensitization: No data available

Target organs: No data available

Section 12: Ecological Information

Ecotoxicity: No data available

Mobility: No data available

Biodegradation: Readily biodegradable

Bioaccumulation: No data available

Avoid disposal in public sewers and drains

Section 13: Disposal Considerations

This material or its residues should not be disposed in drains or in regular trash cans. Contact a licensed waste disposal professional to dispose this material or its residues.

Section 14: Transport Information

DOT regulations: Not classified as dangerous goods

- **Land transport ADR/RID (cross-border):** Not classified as dangerous for road transport
- **Maritime transport IMDG:** Not classified as dangerous for sea transport
- **Air transport ICAO-TI and IATA-DGR:** Not classified as dangerous for air transport

Section 15: Regulatory Information

US Federal Regulations

- Hazardous substance and Reportable Quantity:
 - SARA 302: Not listed
 - SARA 313: Not listed
- State Regulations Right-to-Know
 - Massachusetts – Not listed
 - New Jersey – not listed
 - Pennsylvania – not listed
 - California Proposition 65: Not listed
- Other Information
 - NFPA Rating
 - Health: 2
 - Flammability: 1
 - Instability: 0
 - HMIS Classification
 - Health: 2
 - Flammability: 1
 - Physical: 0

Sodium stearate is listed on the United States TSCA

Section 16: Other Information

SDS date of preparation/update: 03/25/2021 Version 001

Disclaimer: For R&D use only, not for drug or household use