

SAFETY DATA SHEET SORBITAN STEARATE

1. PRODUCT INFORMATION AND COMPANY IDENTIFICATION

Product Name:	Sorbitan Stearate
Company:	Natural Bulk Supplies, 318 Half Day Rd, # 348, Buffalo Grove, IL 60089 Phone: 847-489-7180

Emergency Contact: Infotrac: 800-535-5053(North America) +1-352-323-3500 (International)

2. HAZARD IDENTIFICATION

Classification

No classification is assigned according to OSHA HCS 2012.

Label Elements

Hazard Pictograms Not applicable

Signal Word Not applicable

Hazard Statements

Not applicable.

Precautionary Statements

Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Generic Chemical Name	Product Type	# Synonyms	CAS Number	Impurities which contribute to the classification of the substance
SORBITAN MONOSTEARATE	Substance	Sorbitan Monostearate; Anhydrosorbitol stearate; Octadecanoic acid, sorbitan monoester;		There are no impurities which contribute to the classification of the substance

Note: The information contained within this document was prepared by technical personnel and is believed to be true and accurate to the best of our knowledge. However, no warranty, express or implied, is provided regarding merchantability, fitness for a particular purpose, performance, safety, suitability, stability, or other aspects of the product. This information is not comprehensive and does not cover all potential conditions of use, handling, storage, disposal, or other factors that may involve legal, environmental, safety, or performance considerations. Natural Bulk Supplies accepts no liability for the use of or reliance upon this information. Our technical personnel are available to address inquiries, but the customer bears utilimate responsibility for the safe handling and use of the product. No suggestions for use are made that would encourage the infringement of existing patents or the violation of any Federal, State, local, or foreign laws.



Stearic acid, sorbitan ester; Sorbitan, monooctadecanoate; Sorbitan, stearate; SORBITAN STEARATE (INCI
Name).

4. FIRST AID MEASURES

Procedure in Case of:

Ingestion

Seek prompt medical attention. Do not induce vomiting. Vomiting should only be induced by medical personnel. If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person.

Inhalation

Seek prompt medical attention. Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

Skin contact

Remove contaminated clothing and shoes. Wash affected areas with plenty of running water, preferably under a shower. Seek prompt medical attention.

Eye contact

Immediately flush with plenty of running water for at least 15 minutes, keeping eyelids open. Remove contact lenses if easy to do. Seek prompt medical attention.

Most important symptoms/effects, acute and delayed

Ingestion

Toxic effects are not expected due to significant acute toxic ingestion of small amounts of this product

Inhalation

Due to your low vapor pressure, is unlikely to cause inhalation problems at room temperature. No serious adverse effects are expected due to inhalation.

Skin

It is unlikely that exposure to small amounts for short periods, may have any irritant or toxic effect. Prolonged or repeated contact may cause irritation.

Eyes

May cause mild irritation.

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Information for doctor

There is not known any specific antidote. Direct the treatment in accordance with the symptoms and clinical conditions of the patient.

5. FIRE FIGHTING MEASURES

Extinguishing Media

In case of fire, use: Water spray. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder.

Specific Hazards

Product is not flammable. Dust can become combustible at high concentrations. In case of combustion it may generate carbon monoxide, besides CO2.

Protective measures for fire-fighters

Water jets should not be used directly on igniting products because it may disperse the material and intensify the fire. Self-contained breathing apparatus and protective clothing are required. Cool the intact fire-exposed containers with water spray and remove them.

NFPA Rating

Health 0 Flammability 1 Instability 0 Special

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Isolate and signalize area. Keep heat and/or ignition sources away. Use personal protection equipment as indicated in Section 8, in order to avoid contact with spilled product.

Environmental Precautions

Prevent product from entering into soil and waterways. Notify the competent authorities if the product has run into drainage systems or watercourse or has contaminated the ground or vegetation.

Methods and materials for containment and cleaning up

Stop if possible. Contain and dike spilled product with earth or sand. Eliminate ignition or heat sources. Transfer to the proper container. Collect remnants with an appropriate absorbent material. Wash the contaminated surface with water, which should be collected for disposal.



7. HANDLING AND STORAGE

Precautions for safe handling

Use in a well-ventilated area. Avoid inhalation and contact with eyes, skin or clothing through proper protection. If occurs accidental contact, exposed area should be washed immediately. Emergency eyewashes and showers shall be located in accessible locations. Wash hands and face thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage

Store in a covered and well-ventilated area, away from sunlight and sources of heat or open flames. Ensure that the storage location has adequate moisture, pressure and temperature. Keep containers tightly closed when not in use. The product can be stored in tanks, in the liquid state, at temperatures between 55 and 60 °C.

Incompatibilities

Avoid contact with: Strong oxidizing agents. Nitrates.

Packaging Material

Recommended: Stainless steel. Polyethylene. Polypropylene.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

TLV-TWA (ACGIH) 10 mg/m³ (as stearate)

PEL-TWA (OSHA) Not established.

TLV-STEL (ACGIH) Not established.

LT(NR15) Not established.

Odor Threshold Not available.

IDLH Not available.

Biological Exposure Indices (ACGIH) Not established.



Engineering Control Measures

In closed environments, this product should be handled keeping proper exhaust (general diluter or local exhauster).

Individual Protection Measures

Eye Protection

Side shields or wide vision safety goggles.

Skin Protection

PVC apron. It is recommended to adopt safety boots/shoes.

Hand Protection

Gloves made of: Rubber. PVC (Polyvinyl chloride).

Breathing equipment

In case of emergency or contact with high concentrations of the product, wear an air supplied mask or self contained breathing apparatus. It is recommended to wear a face mask with mechanical filter in case of exposure to the particulate material.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Flakes and/or granular powder.		
Odour and Odour threshold	Not available.		
рН	Not applicable.		
Melting point/Freezing point	ca. 53 °C.		
Initial Boiling Point and Boiling Range	Not available.		
Flash point	> 175 °C (open cup).		
Evaporation rate	Not available.		
Flammability (solid, gas)	Not available.		
Upper/lower flammability or explosive limits	Not available.		
Vapour pressure	Not available.		
Vapour density (air = 1)	Not available.		
Relative density (water=1)	ca. 1000 kg/m³ (25 °C).		
Apparent density	Not available.		
Solubility	Insoluble in water and mineral oil (25 °C).		
Partition Coefficient n-octanol/water	Not available.		
Auto-ignition temperature	Not available.		
Decomposition temperature	Not available.		

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Viscosity Not available.

10. STABILITY AND REACTIVITY

Chemical stability

Stable under normal conditions of use and storage.

Reactivity

No hazardous reactivity is expected.

Possibility of Hazardous Reactions Not polymerize.

Conditions to avoid High temperatures, ignition sources and prolonged exposure to the air.

Incompatible materials

Avoid contact with: Strong oxidizing agents. Nitrates.

Hazardous decomposition products

In case of combustion it may generate carbon monoxide, besides CO2.

Considerations on the use of the product Not applicable.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity LD50, rat: 15,900 mg/kg.

Inhalation Not available.

Dermal Not available.

Skin corrosion/irritation

May cause irritation.

Serious eye damage/eye irritation

Not available

Respiratory or skin sensitization

Not available.



Germ cell mutagenicity

In vitro, hamster lung cells: Chromosomal aberrations occurred at all concentrations tested (ca. $0.1100, 2200 \text{ or } 4300 \ \mu\text{g/mL}$) in the presence of metabolic activation.

Carcinogenicity

None of this products components are listed as carcinogenic by ACGIH, IARC, NTP, DFG or OSHA.

Reproductive toxicity

LOAEL, Wistar rat: 10.000 mg/kg/day [maternal toxicity based on lactation and laxative effects and decreased viability of offspring; reproductive toxicity based on decreased reproductive performance and pregnancy rate; developmental toxicity based on decreased growth of offspring]. NOAEL, Wistar rat: 5.000 mg/kgbw/day [maternal toxicity; reproductive toxicity; developmental toxicity].

Specific target organ toxicity - Single exposure

Not available.

Specific target organ toxicity - Repeated exposure

NOAEL, rat: 2600 mg/kg/day [based on kidney organ weight and total leucocyte count]. LOAEL, mouse: 5200 mg/kg/day [based on enlarged kidneys and nephrosis].

Aspiration hazard Not available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not available.

Persistence and Degradability Readly biodegradable.

Bioaccumulative Potential It is not expected to bioacumulate in the environment.

Mobility in soil

It is expected to have moderate mobility in soil.

Other Adverse Effects

Water hazard class 1: Slightly hazardous to water.

13. DISPOSAL CONSIDERATIONS

Recommended methods of disposal



Product

The preferred options for disposal include reuse, recycling, coprocessing, finding a use for a byproduct, incineration or other thermal destruction process at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. Perform co-processing, incineration or other thermal destruction process at facilities capable of minimizing or reducing air pollution emissions. The disposal must comply with federal, state, and local laws and regulations in accordance with the environmental agencies.

Product Remains

Same method as indicated for product.

Packaging

Do not cut or pierce the packaging, nor do hot work near them. Do not remove labels until the product has been fully removed and the packaging cleaned. The preferred options for disposal include reuse, recycling or reclamation at licensed facilities. All procedures must follow specific operation standards in order to reduce health, safety and environmental risks. The disposal must comply with local legislation and in accordance with standards from local environmental agencies.

14. TRANSPORT INFORMATION

Land Transport ANTT

Product not classified as hazardous in accordance with Resolution 420/2004 - Transport Ministry.

UN number Not applicable

Proper Shipping Name Not classified.

Hazard Class Not classified.

Hazard Number Not classified.

Packaging Group Not classified.

Maritime Transport IMDG

Product not classified as hazardous in accordance with IMDG Code - 2014 Edition – IMO (International Maritime Organization).



UN number Not applicable

Proper Shipping Name Not classified

IMDG Class Not classified.

Packaging Group Not classified.

EmS Not classified.

Air Transport ICAO-TI and IATA-DGR

Product not classified as hazardous in accordance with Dangerous Goods Regulations - 57th Edition - IATA (International Air Transport Association).

UN number N/A Proper

Shipping Name Not classified.

ICAO/IATA Class Not classified.

Label Not classified.

Packaging Group Not classified.

Land Transportation U.S DOT

Product not classified as hazardous in accordance with U.S. DOT (United States Departament of Transportation) - 49 CFR 172.101.

Packaging Type Bulk and Non-bulk

Proper Shipping Name Not classified.

Hazard Class or Division Not classified.



ID Number Not classified.

Packaging Group

Not classified.

Remarks Not classified.

15. REGULATORY INFORMATION

Applicable standards

Resolution 420 / 2004 – Transport Ministry. Dangerous Goods by Road (ADR) – Available from January 1st, 2011 – Unece (United Nations Economic Commission for Europe). Brazilian Technical Standards Association (ABNT) – NBR 14725 – Part 1 to 4. U.S.A Department of Transportation – DOT – 49 CFR 172.101. Dangerous Goods Regulations - 57th Edition - IATA (International Air Transport Association). IMDG Code - 2014 Edition – IMO (International Maritime Organization).

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III - Sections 311 / 312 (40 CFR 370 Subparts B and C)

Immediate (Acute) Health Hazard: No. Delayed (Chronic) Health Hazard: No. Fire Hazard: No. Sudden Release of Pressure Hazard: No. Reactive Hazard: No.

SARA Title III - Section 313 (40 CFR 372.65)

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

SARA Title III - Section 302 (40 CFR 355 Appendix A)

This product does not contain an Extremely Hazardous Substance (EHS) that require emergency planning based on Threshold Planning Quantities (TPQ).

CERCLA (40 CFR 302.4) / SARA 304

This product does not contain a Reportable Quantity (RQ) substance.

New Jersey Hazardous Substance List

This product contains substances which are exempt from the list.



California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm.

Pennsylvania Hazardous Substance List

This product contains substances which are exempt from the list.

Inventory Status

United States & Puerto Rico – Toxic Substances Control Act (TSCA) Inventory	Yes
Canada – Domestic Substances List (DSL)	Yes
Canada – Non-Domestic Substances List (NDSL)	Νο
Europe – European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe – European List of Notified Chemical Substances (ELINCS)	Νο
Australia – Australian Inventory of Chemical Substances (AICS)	Yes
Philippines – Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Japan – Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea – Existing Chemicals List (ECL)	Yes
China – Inventory of Existing Chemical Substances in China (IECSC)	Yes
New Zealand – New Zealand Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).



16. OTHER INFORMATION

All statements, technical information and recommendations contained herein are based on tests and data which Natural Bulk Supplies believes to be currently reliable, but this accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. This information is not intended as a license to operate under or a recommendation to practice or infringe any patent of this company or others covering any process, composition of matter or use. Since we shall have no control of the use of the product described here in, we assume no Liability for loss or damage incurred from the proper or improper use of such product.