Registered office: Pirojshanagar, Eastern Express Highway, Vikhroli, Mumbai 400 079, India. Phone: (91-22) 2518 8010 / 2518 8020 / 2518 8030 extn: 4768 Fax: (91-22) 2518 8096 / 2518 8068 e-mail: rv.dubhashi@godrejinds.com

1 Identification

- · Trade name: <u>Stearic acid</u>
- CAS Number:
- 57-11-4
- **EC number:** 200-313-4
- *Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.*
- Application of the substance / the mixture Used in Soaps, cosmetics, detergents; Lubricants, softening and release agents
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Godrej Industries Ltd. Plot No 3, Village Kanerao, Taluka Valia, District Bharuch, Gujarat, India, Pin: 393135
- · Information department:
- Mr. Hemant Sawant hemant.sawant@godrejinds.com T: 91-2643 270756 / 57 / 58 / 59 / 60 Office hours only (08.30 – 17.00 hours GMT +4.5 hours) F: 91-2643 270018 • Emergency telephone number:
- Contact details of European importer: Emergency telephone number: 9909028240, 9820607143, 9820305315

Other Comments (e.g. language(s) of the phone service): English

2 Hazard(s) identification

• *Classification of the substance or mixture The substance is not classified according to the Globally Harmonized System (GHS).*

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable. • Information concerning particular hazards for human and environment: Not applicable.
- · Label elements
- · Labelling according to EU guidelines:
- The product has been classified and marked in accordance with directives on hazardous materials.
- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)

HEALTH①Health = 0FIRE①Fire = 0REACTIVITYReactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 2)

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| 3 Comp | osition/inform | nation on in | gredients | | | |
|------------|------------------|----------------|-------------|----------|--|--|
| · Chemic | al characterizat | ion: Substance | es | | | |
| · CAS No | . Description | | | | | |
| | Stearic acid | | | | | |
| · Identifi | ation number(| s) | | | | |
| · EC nun | ber: 200-313-4 | | | | | |
| · Additon | al information: | | | | | |
| | ar Formula: Cl | | | | | |
| Molecul | ar weight: 284. | 48 | | | | |
| | he substance is | | of SVHC sul | ostances | | |

4 First-aid measures

· Description of first aid measures

· General information: Contact physician.

· After inhalation: Sore throat, cough. Remove to fresh air. If suffocation is serious, take to a physician.

· After skin contact:

Redness, pain. Remove contaminated clothing, flush skin with water or shower, take to a physician if necessary.

- After eye contact: Redness, pain. Flush with water; take to a physician if necessary.
- · After swallowing:

Sore throat, abdominal pain. Rinse mouth, drink plenty of water, see physician. Do not give anything by mouth to an unconscious person.

• Most important symptoms and effects, both acute and delayed Sore throat, abdominal pain

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

- · Suitable extinguishing agents: Dry powder, carbon dioxide or foam.
- · For safety reasons unsuitable extinguishing agents: Water jet.
- · Special hazards arising from the substance or mixture

Combustible, keep away from open flame, no smoking. Liquid product may have temperature exceeding 69 deg C · *Advice for firefighters*

- · Protective equipment: Use self-contained breathing equipment if in confined place.
- Additional information No further relevant information available.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Avoid contact with skin and eyes. Use gloves, face shield.
- Environmental precautions: Do not allow to flow into drainage system.

• Methods and material for containment and cleaning up:

Collect leakage in sealable containers, soak up with sand or other inert absorbent and remove to safe place. Wash site with sodium bicarbonate solution or soda ash. Can also allow spillage to solidify, and then shovel into containers. Clean up area immediately.

· Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

(Contd. on page 3)

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Trade name: Stearic acid

See Section 13 for disposal information.

7 Handling and storage

· Precautions for safe handling

Use gloves and wear goggles when handling. Always work safely around open hatches on bulk tanks. The low density makes flotation difficult for immersed person.

- · Information about protection against explosions and fires: Avoid open flames.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- *Requirements to be met by storerooms and receptacles: Keep in a cool and dry place, avoid extreme heat and cold. Store in clean, dry preferably stainless steel vessels.*
- · Information about storage in one common storage facility:

In bulk, store at about 5-10 deg C above melting point or ambient. Temperature higher than necessary degrades quality at rates dependent on time and temperature of exposure.

· Further information about storage conditions:

Exposure to ultraviolet light and sunlight must be minimized to prevent quality loss.

· Specific end use(s) Used in Soaps, cosmetics, detergents; Lubricants, softening and release agents

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:
- 57-11-4 stearic acid, pure

Russia - Occupational Exposure Limits (OELs); STEL 5 mg/m3, JUN2003

- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Appropriate NIOSH/MSHA approved air-purifying respirator should be used if a mist, vapor or dust is generated. A NIOSH/MSHA approved self-contained breathing apparatus or air-supplied respirator is recommended if the concentration exceeds the capacity of cartridge respirator.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)

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| rade name: Stearic acid | |
|---|---|
| • Penetration time of glove mater protective gloves and has to be o • Eye protection: | ial The exact break through time has to be found out by the manufacturer of th observed. |
| Tightly sealed goggle | S |
| Body protection: Protective wor | k clothing |
| 9 Physical and chemical pro | perties |
| · · | |
| Information on basic physical a General Information | nd chemical properties |
| Appearance: | Solid |
| · Form: | Leaflet |
| · Color: | White |
| · Odor: | Pungent, oily |
| · Change in condition | |
| Melting point/Melting range: | 69.3 °C (157 °F) |
| Boiling point/Boiling range: | ≥ 383 ≤ 385.8 °C (≥ 721 ≤ 726 °F) (Atm. Press. 1013 mBar) |
| · Flash point: | 200 °C (392 °F) (Calculated) |
| · Flammability (solid, gaseous): | Product is not flammable. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapor pressure at 20 °C (68 °F) | : < 0.01 hPa (< 0 mm Hg) |
| • Density at 20 •C (68 •F): | 0.94 g/cm ³ (7.844 lbs/gal) |
| · Solubility in / Miscibility with | |
| Water at 20 •C (68 •F): | $< 0.05 \ g/l$ |
| • Other information | Soluble in alkyl acetates, alcohols, HCOOCH3, phenyls, CS2, CCl4 |

10 Stability and reactivity

· Reactivity

- · Chemical stability This product is stable under normal conditions.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- Incompatible materials: Strong oxidizing agents.
- · Hazardous decomposition products: carbon monoxide and/or carbon dioxide.
- Additional information:

Does not decompose up to 204 °C. Thermal decomposition or burning may produce carbon monoxide and/or carbon dioxide.

(Contd. on page 5)

US/

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| Information on toxicological effects Acute toxicity: IDJCS0 values that are relevant for classification: Oral LDS0 >5000 mg/kg (rat(Wistar)male/female) Dermal LDS0 > 2000 mg/kg (rat(Wistar)male/female) Primary irritant effect: on the esk: No trivitant effect. Sensitization: No sensitizing effects known. Additional toxicological information: Carcinogenic categories IARC (International Agency for Research on Cancer) Substance is not listed. NTP (National Toxicology Program) Substance is not listed. OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed. 2 Ecological information Toxicity: Aquatic toxicity: NOEC (3 d) 1016 mg/L (Scenedesmus subspicatus (Algae)) LCS0 (48 h) > 10000 mg/L (Leucisus idus) Persistence and degradability Biodegradability Biodegradability Biodegradability Biodegradability Biodegradability Biodegradability Biodegradability Biodegradability Biodegradable Bio accumulative potential: The substance is expected to be non bio-accumulative. Additional coclological information: General notes: Generally not hazardous for water Result: Readily Biodegradable Bio accumulative potential: The substance is expected to be non bio-accumulative. Mobility in soil Koc Value at 25 °C is found to be 51050 indicating that stearic acid is non mobile in soil. Additional ecological information: General notes: Generally not hazardous for water<th>1 To</th><th>xicological information</th> | 1 To | xicological information |
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| Oral LD50 >5000 mg/kg (rat(Wistar)male/female) Dermal LD50 > 2000 mg/kg bw (Rabbit (New Zealand White) male/female) Primary irritant effect: •••••••••••••••••••••••••••••••••••• | | • |
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| • | | |
| • | 3 Di | posal considerations |
| · Waste treatment methods | | • |

· Recommended cleansing agent: Not available

(Contd. on page 6)

Registered office: Pirojshanagar, Eastern Express Highway, Vikhroli, Mumbai 400 079, India. Phone: (91-22) 2518 8010 / 2518 8020 / 2518 8030 extn: 4768 Fax: (91-22) 2518 8096 / 2518 8068 e-mail: rv.dubhashi@godrejinds.com

14 Transport information · UN-Number · DOT, ADR, ADN, IMDG, IATA Not applicable. · UN proper shipping name · DOT, ADN, IMDG, IATA Not applicable. · ADR Not applicable. • Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class Not applicable. Packing group · DOT, ADR, IMDG, IATA Not applicable. · Environmental hazards: · Marine pollutant: No · Special precautions for user Not applicable. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · UN ''Model Regulation'': Not applicable

15 Regulatory information

Trade name: Stearic acid

- · Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara
- Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · Product related hazard information:

The product has been classified and marked in accordance with directives on hazardous materials.

- · National regulations:
- Other regulations, limitations and prohibitive regulations US TSCA: Listed Japan MITI: Listed New Zealand (NZioC): Listed Australian Inventory of Chemical Substances (AICS) : Listed Philippine Inventory of Chemicals and Chemical Substances (PICCS): Listed China (IECSC): Listed

(Contd. on page 7)

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| | e name: Stearic acid |
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| | (Contd. of page |
| · C | hemical safety assessment: A Chemical Safety Assessment has not been carried out. |
| 6 C | Other information |
| Т | his information is based on our present knowledge. However, this shall not constitute a guarantee for an pecific product features and shall not establish a legally valid contractual relationship. |
| - | pepartment issuing SDS: Product safety department. |
| | ontact: |
| - | Ir. Hemant Sawant hemant.sawant@godrejinds.com |
| | : 91-2643 270756 / 57 / 58 / 59 / 60 Office hours only (08.30 – 17.00 hours GMT +4.5 hours) |
| | : 91-2643 270018 |
| | ate of preparation / last revision 05/15/2015 |
| | bbreviations and acronyms: |
| | ID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning th |
| | ternational Transport of Dangerous Goods by Rail) |
| | DR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Internation arriage of Dangerous Goods by Road) |
| | Intege of Dangerous Goods by Road) IDG: International Maritime Code for Dangerous Goods |
| | OT: US Department of Transportation |
| | TA: International Air Transport Association CGIH: American Conference of Governmental Industrial Hygienists |
| | INECS: European Inventory of Existing Commercial Chemical Substances |
| | AS: Chemical Abstracts Service (division of the American Chemical Society) |
| | FPA: National Fire Protection Association (USA) |
| | MIS: Hazardous Materials Identification System (USA) C50: Lethal concentration, 50 percent |
| | D50: Lethal dose, 50 percent |
| · S | ources |
| - | Occupational Safety & Health Administration (OSHA) |
| h | ttps://www.osha.gov/Publications/OSHA3514.html |
| | ECHA Dossier |
| | ttp://apps.echa.europa.eu/registered/data/dossiers/DISS-9d897b7c-2808-010c-e044-00144f67d249/DIS |
| | d897b7c-2808-010c-e044-00144f67d249 DISS-9d897b7c-2808-010c-e044-00144f67d249.html |
| | Vikipedia |
| | ttp://en.wikipedia.org/wiki/Stearic acid |
| | Data compared to the previous version altered. |
| | Section 1: Identification of the substance/mixture and of the company/undertaking |
| | Section 2: Hazards Identification |
| | Section 3: Composition/information on ingredients |
| | Section 4: First-aid measures. |
| | Section 5: Fire-fighting measures |
| | Section 6: Accidental Release measures |
| | Section 7: Handling and storage. Section 8: Exposure Controls/Personal protection. |
| | Section 8: Exposure Controls/Fersonal protection. Section 9: Physical and Chemical properties. |
| | Section 10: Stability and Reactivity. |
| | Section 10: Stability and Reactivity. Section 11: Toxicological Information. |
| | Section 11: Toxicological Information. Section 12: Ecological Information. |
| | Section 12: Disposal consideration. |
| | Section 15: Disposal consideration. Section 15: Regulatory information |
| | Section 15: Negatatory Information Section 16: Other information. |