Registered office: Godrej One, Pirojshanagar, Eastern express highway, Vikhroli, Mumbai-400079, India

Phone: (91-22) 2518 8010 / 8020 / 8030 Ext.: 4768 Fax: (91-22) 2518 8063 / 8068/ 8074

E-mail: rv.dubhashi@godrejinds.com

Rev. No.: 00, Dated: 01.04.2019

1 Identification

· Trade name: <u>Stearic acid – Lubstric 995</u>

· CAS Number:

Palmitic acid – 57-10-3 Stearic Acid – 57-11-4

· EC number:

Palmitic acid - 200-312-9 Stearic Acid - 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:

Unit1: Godrej Industries Ltd. Plot No N-73, Anand Nagar, Village – Jambivli, Ambernath (E), Dist. Thane - 421506, India.

Unit2: Plot No 3, Village Kanerao, Taluka – Valia, District – Bharuch, Gujrat, India

Information department:

Mr. R.V. Dubhashi - rv.dubhashi@godrejinds.com

T: 91-22 2519 4768 Office hours only (08.30 - 17.00 hours GMT +5.5 hours

Emergency telephone number:

Telephone number: **UNIT 1**: +91-251-262-4292, **Unit 2**: 02643 270756 Opening hours: (08.30 –17.00 hours GMT +5.5 hours), office hours only Other Comments (e.g. language(s) of the phone service): English

2 Hazard(s) identification

· Classification of the substance or mixture

Causes mild skin irritation.

Causes mild eye irritation.

- · Label elements
- · GHS label elements

The product is not classified according to the Globally Harmonized System (GHS).

- · Hazard pictograms
- · Signal word Warning
- · Hazard statements

Causes skin irritation.

Causes serious eye irritation.

· Precautionary statements

Wear protective gloves Wear eye protection /

face protection.

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 ${\it If in eyes: Rinse \ cautiously \ with \ water \ for \ several \ minutes. \ Remove \ contact \ lenses, \ if \ present \ and \ easy \ to \ do.}$

Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention. If eye irritation

persists:

Get medical advice/attention. If on skin: Wash with plenty of water.

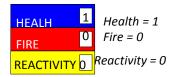
Take off contaminated clothing and wash it before reuse.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 1 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



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

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e-mail: rv.dubhashi@godrejinds.com

Rev. No.: 00, dated: 01.04.2019

Trade name: Stearic acid

3 Composition/information on ingredients

· Chemical characterization: Substances

Composition: Mixture of Palmitic Acid & stearic Acid

· CAS No. Description

Palmitic Acid - 57-10-3, Stearic acid - 57-11-4

· Identification number(s)

· Palmitic acid -200-313-9, Stearic acid -200-313-4

· Additional information:

Molecular Formula: Palmitic Acid- $C_{18}H_{32}O_2$, Stearic Acid- $C_{18}H_{36}O_2$ Molecular weight: Palmitic Acid- 256.42, Stearic Acid- 284.48

· SVHC The substance is not in the list of SVHC substances

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, and 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° 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.

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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:

To be store at 25.0 – 30.0°C, 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:

Palmitic Acid & stearic acid-

Russia - Occupational Exposure Limits (OELs); STEL 5 mg/m3, JUNE 2003

- · 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

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- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of The protective gloves and has to be observed.
- · Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

Appearance: Light cream to Brown flakes

Form: FlakesColor: WhiteOdour: Pungent, oily

· Change in condition

Melting point/Melting range: 53.0°C – 56.0°C

Boiling point/Boiling range: 299°C at 128mm

• Flash point: 196°C (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): 8mm at 232 °C

• **Density at 20 °C (68 °F):** 0.94 g/cm³

· Solubility in / Miscibility with

Water at 20 °C (68 °F): Insoluble

Other information Insoluble 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.
- $\cdot \textit{Hazardous decomposition products:} \ carbon \ monoxide \ and/or \ carbon \ dioxide.$
- · 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)

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral LD50 >5000 mg/kg (rat(Wistar)male/female)

Dermal LD50 > 2000 mg/kg bw (Rabbit (New Zealand White) male/female)

- · Primary irritant effect:
- · On the skin: No irritant effect.
- · On the eye: Not irritating
- · 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.

12 Ecological information

· Toxicity

· Aquatic toxicity:

NOEC (3 d) 1016 mg/L (Scenedesmus subspicatus (Algae))

LC50 (48 h) > 10000 mg/L (Leucisus idus)

· Persistence and degradability

Biodegradation in Water:

Conc.10 mg/L %Degr.72

Parameter: CO2 evolution Sampling time: 28 d

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
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · **Recommendation:** Waste may be disposed of by a licensed waste disposal company.
- · Uncleansed packaging:
- · Recommendation: Follow local, state and federal disposal regulations.
- · Recommended cleansing agent: Not available

(Contd. on page 6)

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4. 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

- · 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

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information presented here is believed to be accurate and pertains only to the product when stored in a sealed condition, as prescribed here. The information is given in good faith, but no warranty, express or implied, is made. Users should make their own investigations, for their specific applications and processes, to determine the suitability of the safety information mentioned here. Godrej Industries Limited will in no way be liable for any claims, losses and / or damages of any third party, or for lost profits, or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, from the use of this product.

- · **Department issuing SDS:** Product safety department.
- · Contact:

Mr. R.V. Dubhashi - rv.dubhashi@godrejinds.com

T: 91-22 2519 4768 Office hours only (08.30 – 17.00 hours GMT 5.5 hours)

· Date of last revision 01.04.2019

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

IMDG: Intérnational Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial

Hygienists EINECS: European Inventory of Existing Commercial

Chemical Substances CAS: Chemical Abstracts Service (division

of the American Chemical Society) NFPA: National Fire

Protection Association (USA)

HMIS: Hazardous Materials Identification

System (USA) LC50: Lethal concentration, 50

percent

LD50: Lethal dose, 50 percent

- Sources
- Occupational Safety & Health Administration (OSHA)

Https://www.osha.gov/Publications/OSHA3514.html

ECHA Dossier

http://apps.echa.europa.eu/registered/data/dossiers/DISS-9d897b7c-2808-010c-e044-00144f67d249/DISS-9d897b7c-2808-010c-e044-00144f67d249 DISS-9d897b7c-2808-010c-e044-00144f67d249.html

-Wikipedia http://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.

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- Section 8: Exposure Controls/Personal protection.
- Section 9: Physical and Chemical properties.
- Section 10: Stability and Reactivity.
- Section 11: Toxicological Information.
- Section 12: Ecological Information.
- Section 13: Disposal consideration.
- Section 15: Regulatory information
- Section 16: Other information.