

Godrej Industries Limited

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Material safety data sheet (MSDS)

1. Chemical Product and Company Information

Trade Name	:	HYTITRE ACID
Manufacture's Name and Address	:	Godrej Industries Limited, Eastern Express Highway, Vikhroli (east), Mumbai, India. Pin - 400 079
Telephone	:	91-22-25188010 / 20 / 30
Fax No.	:	91-22-251880 96 / 68

2. Composition / Ingredients

Chemical Composition	:	Stearic Acid > /= 90 %
Average Molecular Weight	:	282.0
Chemical Identities CH ₃ (CH ₂) ₁₆ COOH	:	Synonyms: Octadecanoic Acid
		CAS numbers: 57-11-4

3. Hazard Identification (Reference: 4,)

Health Rating	:	Slight
Flammability Rating	:	Slight
Reactivity Rating	:	Slight
Contact Rating	:	Slight
Storage	:	General

4. First-aid Measures (Reference: 4, 5)

Ingestion	:	Drink plenty of water.
Skin	:	Remove contaminated clothing and wash exposed area with plenty of water, followed by soap water.
Eye	:	Irrigate the eyes with plenty of water.
Inhalation	:	Take person into fresh air.

** In all of the above cases, get a doctor to check the person concerned*

5. Fire hazard and Fire-fighting Measures (Reference: 1, 5)

Flammability	:	Flammable and combustible in contact with heat or fire.
Means of Extinction	:	Use water spray, Carbon Dioxide, Dry Chemical or Alcohol Foam. Use water to keep the fire-

		exposed container cool.
Flash Point	:	196 ° C
Auto Ignition	:	395 ° C
Hazardous Combustion Product	:	None
6. Accidental Release (Reference: 4, 5)		
Personal Protection	:	Use complete protective gear as prescribed in section 8.
Leak and Spill Procedures	:	Remove sources of ignition, ventilate area, sweep up store in a closed container.
7. Handling and Storage Measures (Reference: 4, 5)		
Handling Containers	:	Use full protective gear. Protect containers from physical damage / direct sunlight / water.
Storage Conditions of Containers	:	Use leak-proof and sealed bags. Store on pallets in well ventilated dry locations at ambient temperature away from direct sunlight.
8. Exposure Controls and Personal Protection Measures (Reference: 4 , 5)		
Engineering controls : Use adequate ventilation to keep airborne concentrations low. Avoid inhalation of heated vapours.		
ACGIH TLV : 10 mg / M ³ Total Dust OSHA PEL : 15 mg / M ³ Total Dust		
Personal protection :		
Skin	:	Rubber Gloves
Respiration	:	Air respirator
Eyes	:	Goggles
Feet	:	Safety Shoes
Body	:	Lab Coat
Hygienic precautions	:	Remove contaminated clothing and wash hands between breaks and at the end of duty hours. Eye washes & Emergency Showers must be located in all work & storage areas.
9. Physical and Chemical Properties (Reference: 1 , 4)		
Physical State	:	Soloid Flakes
Odour and Appearance	:	White Flakes with slight characteristic Odour
Specific Gravity	:	0.847 at 69° C
Boiling Point	:	299 ° C 128 mm
Melting point	:	65 - 68 ° C

Vapour Pressure	:	1mm at 173.7° C (8 mm at 232 °C)
Vapour Density (Air = 1)	:	9.8
Solubility in water (20° C)	:	Insoluble
10. Reactivity Data (Reference: 4, 5)		
Chemical Stability	:	Product is very stable under the prescribed storage conditions.
Incompatibility with other Substances	:	Strong Oxidising agents.
Reactivity and under what conditions	:	None
Hazardous Decomposition	:	Acrid smoke and irritating fumes of Carbon Oxides when heated BP.
Hazardous Polymerisation Products	:	None.
11. Toxicological Properties (Reference: 2, 3, 4, 5)		
Toxicity	:	Non toxic
Skin Contact	:	Slight
Inhalation Acute	:	None
Skin Absorption	:	None
Inhalation Chronic	:	None
Eye Contact	:	Slight
Ingestion	:	rat LD ₅₀ > 2 gm/Kg
Dermal	:	rabbit LD ₅₀ > 5 gm/Kg
Effect of Acute and Chronic Exposure to Material	:	The extensive use of Stearic Acid in Industry has not been accompanied by any reports of injury
Irritancy of Material	:	Slight
Carcinogenicity, Reproductive effects, Terratogenicity and Mutagenicity	:	None Reported
12. Ecological Information (Reference: 4, 5)		
<p>The product should not get into water without treatment. Dissolved in water, the material is easily biodegradable (90%) and will not cause any disturbance in waste water treatment plants. Due to its insolubility in water, larger amounts need to be eliminated by separators typically used for fats and oils.</p> <p>Ecotoxicity : None Reported</p>		
13. Waste Disposal (Reference: 4, 5)		
Leak-and-Spill Procedures	:	Sweep up and store in closed container.
Disposal	:	Stored waste / recovered material , used for recycle along with crude oils. Any unrecoverable /recyclable materials should be

disposed off in accordance with the local, state and federal regulations.

14. Transport Recommendations (Reference: 4, 5)

No special conditions, as it is not a regulated product. However one should observe the usual precautionary measures for transporting chemical cargo.

15. Regulatory requirements (Reference: 4, 5)

According to the data available, the product is not regulated product. However one should observe prescribed Federal, State and Local measures for dealing with chemicals.

The 2 major components are listed on EINECS (EU), TSCA (USA), DSL (Canada), AICS (Australia) and MITI (Japan), Korea & Philippines
EINECS No (of Component only) :Stearic Acid 200-313-4
Not listed as a Carcinogen by NTP, IARC or OSHA

16. Other Information

Sources of information

1. Fatty acids — Klare Markley (1960)
2. Palm Oil Developments No. 28 Page 22-49 (March 1998)
3. JAOCS 56 Page 760A - 767A (1979)
4. J T Baker Chemicals — MSDS of Stearic Acid (1-1-1999)
5. Acme Hardesty Chemicals — MSDS of Stearic Acid

DISCLAIMER

The information presented here is believed to be accurate and pertains only to the product when stored in a sealed condition, as prescribed above. The information is given in good faith, but no warranty, express or implied, is made. Users should make their own investigations, to determine the suitability of the above mentioned safety information for their specific applications and processes. Godrej Industries Limited shall in no way be liable for any claims, losses and 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.