VVF Limited

VVF Limited

Address: 109, Sion (East), Mumbai 400 022, India Telephone: 91-22-40282000; Fax: 91-22-24073771 Website: www.vvfltd.com; E-mail: doy@vvfltd.com

MATERIAL SAFETY DATA SHEET

Product Name: Lauric-Myristic Acid C12-C14 FA	Version: 1.01	Date: May 25, 2009
---	---------------	--------------------

1. CHEMICAL PRODUCT IDENTIFICATION	
1.1 Product Name	Lauric-Myristic Acid (C12-C14 FA)
1.2 Common Chemical Name	Lauric-Myristic Acid
1.3 Product Code (Supplier)	Lauric-Myristic Acid (C12-C14 FA)

2. COMPOSITION / INFORMATION ON INGREDIENTS	
2.1 Chemical Characterization (Substance)	
2.2 Compound, % by Weight	
2.3 CAS Number	
2.4 EINECS Number	
2.5 Formula	

2. COMPOSITION / INFORMATION ON INGREDIENTS			
Blend of Following Acids	CAS Number	EINECS Number	% by Weight
Decanoic Acid	334-48-5	206-376-4	2.0 Max
2. Dodecanoic Acid	143-07-7	205-582-1	72 Min
3. Tetradecanoic Acid	544-63-8	208-875-2	20-28
4. Hexadecanoic Acid	57-10-3	200-312-9	4.0 Max

3. HAZARD IDENTIFICATION		
3.1 European Hazard Classification	Xi - irritant, R36 - Dodecanoic Acid causes irritation	
	to eyes; not applicable for other components	
3.2 Environmental Hazards	None identified	
3.3 Human Health Hazards, Effects, and Symptoms:		
a. Ingestion	Causes irritation to the mucous membrane	
b. Inhalation	No harmful effect expected at ambient temperature.	
	Vapours cause irritation	
c. Skin Contact	Slight irritant	
d. Eye Contact	Mild irritant	

4. FIRST AID MEASURES	
4.1 Inhalation	Take affected person into open air
4.2 Skin Contact	Remove contaminated clothing, and wash thoroughly with soap and
	water
4.3 Swallowing	Do not provide any type of ingestion; seek medical help immediately
4.4 Eye Contact	Immediately flush eyes with a direct stream of water for at least 15
-	minutes and seek medical help

5. FIRE FIGHTING MEASURES	
5.1 Extinguishing Media	Carbon dioxide, dry chemical or foam
a. Suitable	Carbon dioxide, foam



5. FIRE FIGHTING MEASURES	
b. Not Suitable	Water may be ineffective
c. Special Fire Fighting Procedures	In case of high temperatures or fire, use a water jet to cool the tank containing the product
5.2 Unusual Fire or Explosion Hazards	None
5.3 Hazardous Thermal Decomposition	Upon decomposition, the product releases carbon dioxide, carbon monoxide, hydrocarbons, soot, aldehydes and ketones
5.4 Protection for Fire Fighters	Wear self-contained breathing apparatus and protective clothing to avoid direct contact with eyes and skin

6. ACCIDENTAL RELEASE MEASURES		
6.1 Personal Precautions	Wear personal protection gear. Observe all standard	
	industry measures	
6.2 Environmental Precautions	In case of spillage, cover the spilt amount with sand or	
	soil to absorb the product. Then, collect the sand or soil	
	with the product absorbed into a suitable container and	
	dispose. Sweep or shovel solid matter. Prevent entry of	
	product into drains and ground water	
6.3 Clean Up Method	Cover the product with dry earth or sand so that it may be	
	absorbed. Sweep or shovel solid matter. Then, transfer	
	into a container for disposal. Wash affected area with	
	water and detergent	

7. HANDLING AND STORAGE	
7.1 Handling	Follow good hygiene and safety procedures. Avoid
	any direct eye and/or skin contact with the product.
	Wash hands with soap after handling
7.2 Storage	Store in sealed containers, in a cool and dry place,
	away from heat, strong acids and oxidising agents
7.3 Suitable Packing Materials	HDPE bags, stainless steel tanks
7.4 Unsuitable Packing Material	Unlined MS drums

8. EXPOSURE CONTROLS / PERSONAL PROTECTION		
8.1 Ventilation / Engineering Controls	Use adequate ventilation to keep airborne	
	concentration low. Avoid inhalation of vapours	
8.2 Respiratory System Protection	None required when adequate ventilation is	
	available at ambient temperature. In the presence	
	of mist/vapours, use self-contained	
	NIOSH/MSHA approved respirator	
8.3 Skin and Body Protection	Wear a uniform, apron and rubber boots	
8.4 Eye Protection	Wear safety goggles or a face mask	
8.5 Other Protective Equipment	Eye wash, safety shower, protective clothing	

9. PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Average Molecular Weight	Approximately 208



\/\\ <i>/</i>		∽ : +	~~
VV			-

9.2 Specific Gravity	Not available
9.3 Gas Density	Not available
9.4 Liquid Density	$0.875 \text{ at } 40^{\circ}\text{C}$
9.5 Vapour Pressure	At 72 ⁰ F (22 ⁰ C) 1mm Hg
9.6 Solubility in Water	Insoluble in water
9.7 Percent Volatiles by Volume	Not available
9.8 Evaporation Rate	Not available
9.9 pH	Not available
9.10 Sublimation Point	Not available
9.11 Appearance, Odour and State	Clear liquid at 40°C with a characteristic fatty odour

10. STABILITY AND REACTIVITY	
10.1 Chemical Stability	Stable under normal operational conditions
10.2 Conditions to Avoid	Sources of heat, ignition and flame
10.3 Materials to Avoid	Strong acids and oxidising agents
10.4 Hazardous Polymerisation Products	None
10.5 Hazardous Decomposition Products	Carbon monoxide and carbon dioxide

11. TOXICOLOGICAL INFORMATION		
11.1 Acute Toxicity	Non toxic	
a. Oral (LD50) (Rat)	10 mg /kg	
b. Dermal (LD50) (Rabbit)	Not available	
c. Inhalation (LC50)	Not available	
d. Skin Irritation	Causes mild irritation	
e. Eye Irritation	Corneal opacity and mild conjunctivitis is observed	
	due to irritation	
f. Carcinogenicity	Not reported	

12. ECOLOGICAL INFORMATION		
12.1 Comment	This product is very easily biodegradable (90%) and	
	does not cause difficulties in waste water treatment	
	plants. Being insoluble in and lighter than water, large	
	amounts of contamination can be separated using	
	standard oils and fats separators	
12.2 Eco-Toxicity	Data not available	

13. DISPOSAL CONSIDERATIONS		
1	Reprocess or dispose of in accordance with local, state and federal regulations, in an approved area	

14.TRANSPORT INFORMATION	
14.1 UN Number	Not regulated for transport
14.2 Land Road / Railway	
14.21 ADR/RID Class	Chemicals N. O. S. (non regulated)
14.22 ADR/RID Item Number	Chemicals N. O. S. (non regulated)
14.3 Inland Waterways	
14.31 ADNR Class	Chemicals N. O. S. (non regulated)
14.4 Sea	



14.41 IMDG Class	Chemicals N. O. S. (non regulated)
14.42 IMDG Page Number	
14.5 Air	
14.51 IATA-DGR Class	Chemicals N. O. S. (non regulated)
14.6 National Transport Regulations	Chemicals N. O. S. (non regulated)

15. REGULATORY INFORMATION		
15.1 EEC Regulations	This product has been classified in accordance with the hazard	
	criteria of controlled product regulation	
15.2 Inventory Status	TSCA, AICS, DSL, IECSE, EINECS, ENCS, KECI, PICCS	
15.2 Others	According to available data, the product is not regulated.	
	However, one should observe prescribed federal, state and	
	local measures while dealing with chemicals	

16. OTHER INFORMATION		
16.1 REACH Pre-Registration Number		
16.2 Legend	Not applicable; not available	
16.3 History:		
a. Date of First Issue	July 20, 2004	
b. Date of Last Issue	July 20, 2004	
c. Date of Current Issue	May 25, 2009 Version: 1.01	
MSDS Prepared By	Mr. C.R.Marathe	
MSDS Authorised By	Dr. Kashinath Pandit	

Warning: The information given in this MSDS has been compiled from sources which are considered by us as latest, accurate, and dependable. However, VVF Limited expresses no warranty or guarantee of any kind, with respect to any damages or injuries arising out of use of this material alone or other wise and the correctness of the data presented. VVF Limited assumes no responsibility, whatsoever for any injury to the recipient, user, or third person for any damages resulting from use of this product, alone or with other material.

* * * * *