VVF Limited

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MATERIAL SAFETY DATA SHEET

Product Name: Capric Acid 99	Version: 1.01	Date: May 25, 2009
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1. CHEMICAL PRODUCT IDENTIFICATION	
1.1 Product Name	Capric acid
1.2 Common Chemical Name	Capric acid, Decanoic acid
1.3 Product Code (Supplier)	Capric 99

2. COMPOSITION / INFORMATION ON INGREDIENTS	
2.1 Chemical Characterization (Substance)	Decanoic acid
2.2 Compound, % by Weight	95 - 100
2.3 CAS Number	334 - 48 - 5
2.4 EINECS Number	206 - 376 - 4
2.5 Formula	$C_{10}H_{20}O_2$

3. HAZARD IDENTIFICATION	
3.1 European Hazard Classification	Xi –Irritant, R36/38. Causes irritation to eyes and
	skin
3.2 Environmental Hazards	Product is biodegradable
3.3 Human Health Hazards, Effects,	and Symptoms:
a. Ingestion	Causes irritation to mucous membrane
b. Inhalation	No harmful effect expected at ambient temperature.
	Vapours or mist can cause irritation, coughing or
	difficulty with breathing
c. Skin Contact	Can cause severe irritation to skin upon prolonged
	exposure
d. Eye Contact	Can cause severe irritation to eyes upon prolonged
	exposure

4. FIRST AID MEASURES	
4.1 Inhalation	Take affected person into open air. In case of breathing difficulties, provide artificial respiration and seek medical attention immediately
4.2 Skin Contact	Remove contaminated clothing, and wash thoroughly with soap and water
4.3 Swallowing	Do not provide any type of ingestion if the person is unconscious and do not induce vomiting. Seek medical attention
4.4 Eye Contact	Immediately flush eyes with a direct stream of water for at least 15 minutes and seek medical attention immediately

5. FIRE FIGHTING MEASURES	
5.1 Extinguishing Media:	
a. Suitable	Carbon dioxide, dry chemical or foam
b. Not Suitable	Water may be ineffective
c. Special Fire Fighting Procedures	In case of high temperature or fire, use a water



5. FIRE FIGHTING MEASURES	
	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 and follow 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 absorbed product into a suitable container and dispose. 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. 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 sources, strong acids and oxidising
	agents
7.3 Suitable Packing Materials	HDPE carboys, stainless steel drums, aluminium
	drums or lacquer - lined MS drums
7.4 Unsuitable Packing Materials	Unlined MS drums

8. EXPOSURE CONTROLS / PERSONAL PROTECTION	
8.1 Ventilation / Engineering Controls	Use adequate ventilation to keep airborne
	concentration low. Avoid inhalation of product
	vapours
8.2 Respiratory System Protection	None required when adequate ventilation is
	available at ambient temperature. In presence of
	mist or 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 172.6



9.2 Flash Point	Flash point 152 ^o C
9.3 Gas Density	Not available
9.4 Liquid Density	$0.9 \text{ at } 20^{0}\text{C}$
9.5 Vapour Pressure	At 72°F (22°C)<0.1mm Hg
9.6 Solubility in Water	Very slightly soluble
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	Clear and colourless liquid at 35°C, with a rancid,
State	pungent fatty acid 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	Not reported	
a. Oral (LD50) (Rat)	>2g/Kg	
b. Dermal (LD50) (Rabbit)	>2g/Kg	
c. Inhalation (LC50)	Not available	
d. Skin Irritation	Causes irritation to rabbit's skin	
e. Eye Irritation	Causes irritation to rabbit's eyes	
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	
13.1 Methods of Disposal	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	Chemicals N. O. S. (non regulated)
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 is not classified as dangerous according to the EEC
	directive
15.2 Inventory Status	AICS, China, EINECS, DSL, ENCS, Korea, PICCS, TSCA
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	05-2116454371-50-0000	
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	

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