

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

SAFETY DATA SHEET

Product Name : ERUCIC C22:1>90%	
Version: 2.01	Date: Jan 1, 2015

1. CHEMICAL PRODUCT IDENTIFICATION	
1.1 Product Name	ERUCIC ACID
1.2 Common Chemical Name	ERUCIC ACID
1.3 Product code (Supplier)	ERUCIC ACID 90
1.4 Relevant identified uses of the mixture	<p>Erucic acid has many of the same uses as mineral oils, but it is more readily biodegradable than some. It has limited ability to polymerize and dry for use in oil paints. Like other fatty acids, it can be converted into surfactants or lubricants, and can be used as a precursor to biodiesel fuel.</p> <p>Derivatives of erucic acid have many further uses, such as behenyl alcohol (CH₃(CH₂)₂₁OH), a pour point depressant (enabling liquids to flow at a lower temperature), and silver behenate, for use in photography</p>
1.4 Manufacturer/Supplier:	VVF (India) Limited, 109, Sion (E) MUMBAI – 400022
1.5 Emergency contact details	+ 91-22-9619551607

2. HAZARD IDENTIFICATION	
2.1 Hazard pictograms	No Hazard pictogram
2.2 Signal word	No Single word
2.3 Hazard statements	No Hazard statement
2.4 Environmental Hazards	Product is biodegradable
2.5 Human Health Hazards Effect & symptoms:	
2.5.1 Ingestion	May cause slight irritation to gastrointestinal tract.
2.5.2 Inhalation	No harmful effect expected at ambient temperature. Mist/vapours could be irritant to pulmonary tract.
2.5.3 Skin Contact	Slight irritant.
2.5.4 Eye Contact	Mild irritant.

3. COMPOSITION / INFORMATION ON INGREDIENTS			
3.2 Blend of following acids	CAS Number	EINECS Number	% by wt.
Icosanoic acid	506-30-9	208-031-3	3.0 Max
Eicosenoic acid	---	---	2.0 Max
Docosanoic acid	112-85-6	204-010-8	4.0 Max
Erucic acid	112-86-7	204-011-3	90.0 Min
Tetracosanoic acid	557-59-5	209-180-7	1.5 Max
Nervonic acid	506-37-6		3.0 Max

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	Don't give anything through mouth and 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.

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

**5. FIRE FIGHTING MEASURES**

a. Suitable	Carbon dioxide, foam
b. Not Suitable	Water may be ineffective.
c. Special Fire fighting Procedures	In case of high temperature or fire, use a water jet to cool the tank containing the product
5.2 Unusual Fire / Explosion Hazards	None
5.3 Hazardous Thermal decomposition	On decomposition gives Carbon dioxide ,Carbon monoxide, hydrocarbons, soot, aldehydes and ketones
5.4 Protection of 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. Follow standard industry measures
6.2 Environmental Precautions	In case of spillage, cover the spill 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. 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. Flush affected area with water & detergent

7. HANDLING AND STORAGE

7.1 Handling	Follow good hygiene & safety procedures. Avoid any direct eye &/or skin contact with the product. Wash 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 carboys, stainless steel tanks or lacquer- lined MS drums.
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 vapour
8.2 Respiratory Protection	None required when adequate ventilation available at ambient temperature. In presence of mist/vapour use self contained NIOSH/MSHA approved respirator.
8.3 Skin Protection	Use uniform, apron and rubber boots.
8.4 Eye protection	Use safety goggles or face mask
8.5 Other Protective Equipment	Use safety shoes

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Average molecular weight	~336.0
9.2 Specific Gravity	0.8532 at 70° C
9.3 Gas Density	Not available
9.4 Liquid Density	Not available
9.5 Vapour pressure	At 30° C<1mm Hg
9.6 Solubility in water	Insoluble
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 & State	Pale yellow liquid at 35° C characteristic fatty odour
9.12 Flash Point	113°C closed cup

10 STABILITY AND REACTIVITY

**10 STABILITY AND REACTIVITY**

10.1 Reactivity	Data not available
10.2 Chemical stability	Stable under normal operational condition
10.3 Conditions to avoid	Sources of heat, ignition & flame.
10.4 Materials to avoid	Strong acids and oxidising agents
10.5 Hazardous polymerisation products	None
10.6 Hazardous decomposition Products	Carbon monoxide and Carbon dioxide

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity	Non toxic
a. Oral (LD50) (Rat)	Data Not available
b. Dermal (LD50) (Rabbit)	> 5 g/Kg
c. Inhalation (LC50)	Not available
d. Skin irritation, rabbit	Slight irritant
e. Eye irritation, rabbit	Slight irritant
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 treatments plants. Being water insoluble & lighter than water, large amounts of contamination can be separated using typical standard oil/fats separators
12.2 Eco toxicity	Data not available.

13 DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method	Reprocess or dispose off in accordance with local, state and federal regulation in an approved area.
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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 ADN 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 EEC directive
15.2 Inventory Status	AUSTR, EINECS, DSL, JAPAN, KOREA, PHILIPPINES,
15.3 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 History		
a. Date of first issue	July 20, 2004	
b. Date of last issue	August 09, 2013	
c. Date of current issue	Jan 1, 2015	Version : 2.01
SDS authorised by	Mr. C. R. Marathe	

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