



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: Vegarol®1618 TA, Vegarol®1618 (50:50), Vegarol®1618 PS	
Version: 2.02	Date: Jan 1, 2015

<b>1. CHEMICAL PRODUCT IDENTIFICATION</b>	
1.1 Product Name	Vegarol®1618 TA, Vegarol®1618 (50:50), Vegarol®1618 PS
1.2 Common Chemical Name	Cetostearyl alcohol, Alcohol 14-18, Blend of 1-Hexadecan-1-ol and 1-Octadecan-1-ol
1.3 Product Code (Supplier)	Vegarol®1618 TA, Vegarol®1618 (50:50), Vegarol®1618 PS
1.4 Application of the substance / the preparation uses:	Agriculture, forestry, fishery, Mining, (without offshore industries) Manufacture of pulp, paper and paper products. Manufacture of bulk, large scale chemicals (including petroleum products). Manufacture of fine chemicals. Manufacture of rubber, coating, paints, lubricants, greases & release agents. Manufacture of plastics products, including compounding and conversion. Manufacture of other non-metallic mineral products, e.g. plasters, cement. Preparation of pharmaceuticals, Cosmetics and personal care products.
1.5 Manufacturer/Supplier:	VVF (India) Limited, 109, Sion (E) MUMBAI – 400022
1.6 Emergency contact	+91-22-9619551607

<b>2. HAZARD IDENTIFICATION</b>	
2.1 Hazard pictograms	Not applicable.
2.2 Signal word	Not applicable.
2.3 Hazard statements	Not applicable.
2.4 Precautionary statements	Not applicable.
2.5 Human Health Hazards, Effects, and Symptoms:	
a. Ingestion	May cause slight irritation to gastrointestinal tract
b. Inhalation	No harmful effect expected at ambient temperature. Mist or vapours could cause irritation to the pulmonary tract
c. Skin Contact	Non irritant
d. Eye Contact	Non irritant
2.6 Other Hazard Results of PBT	Not identified as PBT or vPvB substance

<b>3. COMPOSITION / INFORMATION ON INGREDIENTS</b>					
3.1 Chemical Name	Blend of 1-octadecanol and 1-hexadecanol				
Name	CAS No.	EINECS No	Vegarol® 1618 TA	Vegarol® 1618 50:50	Vegarol® 1618 PS
Hexadecan-1-ol	36653-82-4	253-149-0	25 - 35	45 - 55	55 - 65
Octadecan-1-ol	112-92-5	204-017-6	65 - 70	45 - 55	35 - 45

**4. FIRST AID MEASURES**

4.1 Ingestion	Consult a doctor immediately. Drink plenty of water. However, if the person is unconscious, do not provide any type of ingestion
4.2 Inhalation	Remove to fresh air immediately. In case of breathing difficulty try artificial respiration. Get medical attention as soon as possible
4.3 Skin Contact	Wash material off the skin with plenty of soap and water. If redness or itching persists, seek medical attention
4.4 Eye Contact	Wash eyes with water for at least 15 minutes. If redness or itching persists, seek medical attention

**5. FIRE FIGHTING MEASURES**

5.1 Extinguishing Media	
a. Suitable	Carbon dioxide, dry chemical, water fog or foam
b. Not Suitable	Water
c. Special Fire Fighting Procedures	Wear self-contained breathing apparatus and protective clothing to avoid direct contact with eyes and skin. In case of high temperature 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	On decomposition, the product releases Carbon dioxide, Carbon monoxide, hydrocarbons, soot, aldehydes and ketones
5.4 Protection for Fire-Fighters	Self-contained breathing apparatus, protective clothing and a face mask

**6. ACCIDENTAL RELEASE MEASURES**

6.1 Personal Precautions	Wear chemicals safety goggles, respirators, rubber boots and full protective clothing providing coverage to entire body.
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. Prevent entry of product into drains and ground water.
6.3 Clean Up Method	Mop up and collect in dry container for disposal. Flush area with water. Use non sparking tools

**7. HANDLING AND STORAGE**

7.1 Handling	Follow good hygiene and safety procedures. Avoid any direct contact with the product. Wash hands with soap and water after handling the product. Keep away from heat, strong acids and oxidising agents
7.2 Storage	Store in sealed containers in a cool and dry place
7.3 Suitable Packing Materials	Stainless steel tanks or drums or LLDPE lined paper bags & poly bags.
7.4 Unsuitable Packing Material	Unlined MS drums

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

8.1 OSHA permissible exposure limit (PELs)	Not Listed
8.2 ACGIH threshold limit value (TLVs)	Not Listed
8.3 Respiratory System Protection	No protection required when adequate ventilation is available at room temperature. In presence of mist or vapour use self-contained NIOSH/MSHA approved respirator
8.4 Skin and Body Protection	Take shower if the product comes in to contact with skin. Change uniform, apron and rubber boots if contaminated
8.5 Hand Protection	Rubber gloves
8.6 Eye Protection	Safety goggles and face mask. Keep eye wash fountain ready

**9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Physical State	Solid at 25 <sup>o</sup> C
9.2 Colour	Colourless
9.3 Odour	Characteristic fatty alcohol odour
9.4 Boiling Range	305 – 355 <sup>o</sup> C
9.5 Melting Range	47 <sup>o</sup> C – 51 <sup>o</sup> C
9.6 Solubility Water	Insoluble in water
9.7 Relative Density	0.81 at 60 <sup>o</sup> C
9.8 Solubility Oil and Solvents	Not available
9.9 Vapour Density (Air = 1)	Not available
9.10 Vapour Pressure, mm of Hg	Not available
9.11 Flash Point	Approx. 180 <sup>o</sup> C
9.12 Auto Ignition Temperature	Not available
9.13 Lower Explosion Limit	Not available
9.14 Upper Explosion Limit	Not available
9.15 Average Molecular Weight	246 -267



<b>10 STABILITY AND REACTIVITY</b>	
10.1 Reactivity	Data not available
10.2 Chemical Stability	Stable under normal operational conditions
10.3 Conditions to Avoid	Sources of heat, ignition and flame
10.4 Materials to Avoid	Strong acids and oxidising agents
10.5 Hazardous Polymerisation Products	None
10.6 Hazardous Decomposition Products	Partial combustion results in Carbon monoxide, Carbon dioxide, aldehydes. Ketones. Complete combustion results in the formation of Carbon dioxide and Water.

<b>11. TOXICOLOGICAL INFORMATION</b>				
<b>11.1 Acute Toxicity</b>				
Name	CAS. NO	LD50(Oral)	LD 50(Dermal)	LC 50(Oral) rat
1-Hexadecanol	36653-82-4	> 2000 mg/ kg (rat) > 5000 mg/ kg (rat)	> 2000 mg / Kg (rabbit) (Read across 1-Tetradecanol: 112-72-1)	----
1-Octadecanol	112-92-5	> 5000 mg/ kg (rat) > 2000 mg/ kg (rat)	> 2000 mg/kg (Key information was read across from 1-tetradecanol.)	LC50 expected to be > 0.003 ppm (substantially saturated atmospheric Concentration) DATA WAIVED
<b>11.2 CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)</b>				
Name	CAS. NO	Carcinogenicity	Mutagenicity	Toxicity for reproduction
1-Hexadecanol	36653-82-4	Not a carcinogen	Not a mutagen	No adverse reproductive effect
1-Octadecanol	112-92-5	Not a carcinogen	Not a mutagen	No adverse reproductive effect
11.3 Skin Irritation	Non irritant			
11.4 Eye Irritation	Non irritant			
11.5 Sensitization	Non irritant			

**12. ECOLOGICAL INFORMATION**

12.1 Comment	Do not dispose of the material in to the immediate environment. The product should not get into any kind of water without treatment. The product is easily biod- gradable.
--------------	--

**12.2 Biodegradation**

Name	CAS .NO	Method	Result (% degradation)
1-Hexadecanol	36653-82-4	301B	% degradation : 82.4% in 28 days at 15.3 mg/l 10 day window: 75.2%
1-Octadecanol	112-92-5	301D	:38% in 29 days at 5 mg/l : 69% in 29 days at 2 mg/l : < 60% in 10 days window
1-Octadecanol	112-92-5	301B	: 95.6% in 28 days at 14.5 mg/l : 90.2% in 10 day window
Alcohols, C16-18	Mixture of 36653-82-4 +112-92-5 (67762-27-0)	Modified Sturm	% degradation: 21-65% in 28 days at 20 mg/l 10 day window: <60% (60% in 15 days)

**12.3 Bioaccumulation:**

Bioconcentration factor (BCF) = 56 [Golden orfe fish (Leuciscus idus melanotus)],  
BCF <2000 L/kg, hence Not Bioaccumulative.

**12.4 Ecotoxicol effects**

Name	CAS No.	EC 50 (Algae mg/l2 )	NOEL(Biom ass)	NOEL(Gro wth)	EbL50 (96 hr)	LC 50 (96 Hr)
1-Hexadecanol	36653-82-4	Effects seen >LOS (Algae)	10(n,>LoS)	>680(n,LoS)	680(n,>LoS)	>0.4 mg/L (n)>LoS)
Octadecanol	112-92-5	No effects expected at LoS (read across)	>10 (n,>LoS)	----	250 (n, >LoS)	>0.4 (n)>LoS)

**13. DISPOSAL CONSIDERATIONS**

13.1 Methods of Disposal	Disposal methods to be in accordance with local, federal and state environmental regulations
--------------------------	--

**14. TRANSPORT INFORMATION**

14.1 Land Road / Railway	
14.1.1 ADR/RID Class	Chemicals N. O. S. (non regulated)
14.1.2 ADR/RID Item Number	Chemicals N. O. S. (non regulated)



<b>14. TRANSPORT INFORMATION</b>	
14.2 Inland Waterways	
14.2.1 ADNR Class	Chemicals N. O. S. (non regulated)
14.3 Sea	
14.3.1 IMDG Class	Chemicals N. O. S. (non regulated)
14.3.2 IMDG Page Number	Chemicals N. O. S. (non regulated)
14.4 Air	
14.4.1 IATA-DGR Class	Chemicals N. O. S. (non regulated)
14.4.1 National Transport Regulations	Chemicals N. O. S. (non regulated)

<b>15. REGULATORY INFORMATION</b>	
15.1 EEC Regulations	This product is not classified as dangerous according to EEC directive
15.2 Others	According to available data fatty alcohol is not a dangerous chemical. One should, however, observe the usual precautionary measures for dealing with chemicals according to local, state and federal regulations and requirements R phrases = None, S phrases = None

<b>16. OTHER INFORMATION</b>		
16.1 REACH registration ( under multiple registrations)	1.Hexadecan-1-ol, 01-2119485905-24-0013 2 .Octadecan-1-ol, 01-2119485907-20-0012	
16.2 History		
a. Date of first issue	July 20, 2004	
b. Date of last issue	May 2, 2013	
c. Date of current issue	Jan 1, 2015	Version : 2.02
SDS Authorised By	Mr. C. R. Marathe	

Warning: The information given in this SDS has been compiled from sources which are considered by us as latest, accurate, and dependable. However, VVF (India)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 (India) 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.

\*\*\*\*\*