

VVF (India) Limited

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SAFETY DATA SHEET

Product Name	Vegarol [®] 1898 / Vegarol [®] 1899 / Vegarol [®] 18DO / Vegarol [®] 1895 DO / Vegarol [®] 1895		
Version: 2.01		Date: Jan 1, 2015	

1. CHEMICAL PRODUCT IDENTIFICATION			
1.1 Product Name	Vegarol [®] 1898, Vegarol [®] 1899, Vegarol [®] 18DO,		
	Vegarol [®] 1895 DO, Vegarol [®] 1895		
1.2 Common Chemical Name	Stearyl Alcohol, 1-octadecanol		
1.3 Product Code (Supplier)	Vegarol [®] 1898, Vegarol [®] 1899, Vegarol [®] 18DO,		
	Vegarol [®] 1895DO, Vegarol [®] 1895		
1.4 Application of the	Agriculture, forestry, fishery,		
substance / the preparation	Mining, (without offshore industries)		
usages	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 details	+ 91-22-9619551607		

2. HAZARD IDENTIFICATION			
2.1Hazard 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 Sympton	oms:		
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	Generally not hazardous for water.		
Results of PBT	This product is not PBT or vPvB.		

3. COMPOSITION / INFORMATION ON INGREDIENTS 3.1 Chemical Name Stearyl Alcohol,1-octadecanol; Octadecan-1-ol

Name	Name	EINECS	Vegarol	Vegarol®	Vegarol®	Vegarol®	Vegarol
	CAS No.	No	® 1895	1898	1899	1895DO	®18DO
Tetradecanol	112-72-1	204-000-3	1.0 max	0.5 max	nil	nil	nil
Hexadecan-1-ol	36653-82-4	253-149-0	5.0 max	1.0 max	0.5 max	1.0 min	0.7 - 2.5
Octadecan-1-ol	112-92-5	204-017-6	95 min	98 min	99 min	95 min	95 - 98
Ecosan -1-ol	629-96-9	211-119-4	2.0 max	1 max	0.5 max	2 min	0.6 - 1.4



SDS Vegarol 1898, Vegarol 1899, Vegarol 18DO, Vegarol 1895DO, Vegarol 1895, Rev 2.01, Jan 1, 2015

4. FIRST AID M	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		
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	Collect in dry earth or sand. Transfer to container for disposal. Flush affected area with water.		

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 aci	
	oxidising agents
7.2 Storage	Store in sealed containers in a cool and dry place
7.3 Suitable Packing Materials	Stainless steel Iso-tanks, HDPE laminated bags with liners /
	lacquer lined MS drums
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	Safety shower, uniform, apron and rubber boots. Take shower if the product comes in contact with skin.		
8.5 Hand Protection	Rubber gloves		
8.6 Eye Protection	Safety goggles and face mask. Keep source of water like eye shower to wash eyes, in case the product comes in contact		



SDS Vegarol 1898, Vegarol 1899, Vegarol 18DO, Vegarol 1895DO, Vegarol 1895, Rev 2.01, Jan 1, 2015

with it.

9. PHYSICAL AND CHEMICAL PROPERTIES			
9.1 Physical State	Solid at 30 ^o C		
9.2 Colour	White		
9.3 Odour	Practically no odour		
9.4 Boiling Range	330-360		
9.5 Melting Range	$56^{\circ}C - 60^{\circ}C$		
9.6 Solubility Water	Insoluble in water		
9.7 Relative Density	0.805 to 0.815 at 65° C		
9.8 Solubility Oil and Solvents	Not available		
9.9 Vapour Density (Air = 1)	Not available		
9.10 Vapour Pressure, mm of Hg	< 10 mm, at 22 ^o C		
9.11 Flash Point	Approx. 174 [°] C, PMCC		
9.12 Auto Ignition Temperature	250°C		
9.13 Lower Explosion Limit	Lower 1 %		
9.14 Upper Explosion Limit	Upper 8 %		
9.15 Average Molecular Weight	267 - 280		

10 STABILITY AND REACTIVITY	
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	Carbon monoxide and Carbon di oxide

<u>11. TOXICOLOGICAL INFORMATION</u>

11.1 Acute Toxicity

Name	CAS .NO	LD 50(Oral)	LD 50(Dermal)	LC 50 (Inhalative)
1-Octadecanol	ecanol $112-92-5 > 5000 \text{ mg/kg (rat)}$		> 2000 mg/kg	LC50 expected to be
		> 2000 mg/kg (rat)	(Key information	> 0.003 ppm
			was read across	(substantially saturated
			from 1-	Atmospheric concentration)
			tetradecanol.)	DATA WAIVED.

11.2 CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Toxicity for reproduction:

Name	CAS No	Carcinogenicity	Mutagenicity	Toxicity for reproduction
1-Octadecanol	112-92-5	Not a carcinogen	Not a mutagen	No adverse reproductive effects.

11.3 Skin Irritation	Non irritant
11.4 Eye Irritation	Non irritant

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 and lighter than water, large amounts of contamination can be separated using typical standard oil/fats separators



12.2 Biodegradation

Name	CAS .NO	Method	Result	
1-Octadecanol	112-92-5	301D	% degradation : 38% in 29 days at 5 mg/l	
			: 69% in 29 days at 2 mg/l	
			10 day window: <60%	
1-Octadecanol	112-92-5	301B	% degradation : 95.6% in 28 days at 14.5 mg/l	
			10 day window: 90.2%	

12.3 Mobility and bioaccumulation potential:

The data suggest that long-chain alcohols in C6-24 category are non-bio accumulative.

Bioconcentration factor (BCF) = 56 [Golden orfe fish (Leuciscus idus melanotus)],

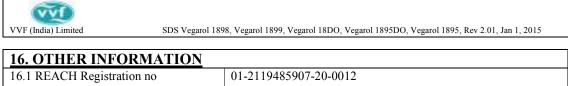
BCF <2000 L/kg, hence Not Bioaccumulative. 12.4 Ecotoxical effects:

Name	CAS No.	EC 50 (Algae mg/l2)	NOEC(Biomass)	ErL50 (96 h)	EbL50 (96 hr)	LC 50 (96 Hr)
1- Octadecanol	112-92- 5	No effects expected at LoS (read across)	>10 (n,>LoS)	<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				
14.11 ADR/RID Class	Chemicals N. O. S. (non regulated)			
14.12 ADR/RID Item Number	Chemicals N. O. S. (non regulated)			
14.2 Inland Waterways				
14.21 ADNR Class	Chemicals N. O. S. (non regulated)			
14.3 Sea				
14.31 IMDG Class	Chemicals N. O. S. (non regulated)			
14.32 IMDG Page Number	Chemicals N. O. S. (non regulated)			
14.4 Air				
14.41 IATA-DGR Class	Chemicals N. O. S. (non regulated)			
14.5 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 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		



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16.2 History					
a. Date of first issue	June 24, 2005				
b. Date of last issue	Sept 25, 2012				
c. Date of current issue	Jan 1, 2015	Version : 2.01			
SDS Authorised By	Mr. C. R. Marathe				

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