VVF (India) Limited

VVF (India) Limited
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SAFETY DATA SHEET

Product Name : Vegarol® 1695; Vegarol® 1698; Vegarol® 1699;	
Version: 2.01	Date: Jan 1, 2015

1. CHEMICAL PRODUCT IDENTIFICATION

1.1 Product Name	Vegarol® 1695; Vegarol® 1698; Vegarol® 1699;
1.2 Common Chemical Name	Cetyl Alcohol / 1-Hexadecanol
1.3 Product Code (Supplier)	Vegarol® 1695; Vegarol® 1698; Vegarol® 1699;
1.4 Application of the substance / the preparation usages:	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 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 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	Causes slight irritation
d. Eye Contact	May cause mild transient irritation
2.6 Other Hazard Results of PBT	Generally not hazardous for water. This product is not PBT or vPvB.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical Name	Cetyl alcohol; Hexadecan-1-ol

Name	CAS No.	EINECS No	% by Weight		
			V1695	V1698	V1699
N-dodecanol	112-53-8	203-982-0	1 Max	0.5 Max	--
Tetradecanol	112-72-1	204-000-3	3 Max	1 Max	--
Hexadecan-1-ol	36653-82-4	253-149-0	95 Min	98 Min	99 Min
Octadecanol	112-92-5	204-017-6	3.0 Max	1 Max	--

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 protective clothing covering the 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, away from source of heat.
7.3 Suitable Packing Materials	HDPE carbuoys, Stainless steel tanks. For pastille form, craft paper bags with liners or 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	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 with it.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical State	Liquid above 60^0C
9.2 Colour	Colourless
9.3 Odour	Practically no odour
9.4 Boiling Range	305 -330
9.5 Melting Range	46^0C – 50^0C
9.6 Solubility Water	Insoluble in water
9.7 Relative Density	0.815 at 60^0C
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 22^0C
9.11 Flash Point	Approx. 180^0C, PMCC
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	238 -249

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 dioxide

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

Name	CAS No.	LD 50(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)	--

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

Name	CAS No	Carcinogenicity	Mutagenicity	Toxicity for reproduction
1-Hexadecanol	36653-82-4	Not a carcinogen	Not a mutagen	No adverse reproductive effects.

11.3 Skin Irritation	No irritation in human being observed through repeated insult test done using undiluted product. Slightly irritating in Rabbit (Draiz test , 24 hours exposure)
11.4 Eye Irritation	Slightly irritation is observed in rabbits.
11.5 Sensitisation	Not sensitised (Guinea pig maximisation test)

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
Hexadecan-1-ol	36653-82-4	301B	% degradation : 62% after 28 days at 17.1mg/l ; 10 day window : <60%

12.3 Mobility and bioaccumulation potential:

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

Bio concentration 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)	NOEL(Biomass)	NOEL(Growth)	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)

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.

16. OTHER INFORMATION

16.1 REACH Registration no :	01-2119485905-24-0013	
16.2 History		
a. Date of first issue	July 20, 2004	
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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