

## **VVF** Limited

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## **MATERIAL SAFETY DATA SHEET**

Volston: 1.01   Date: 1414 25, 2009	Product Name: Vegarol® 1216	Version: 1.01	Date: May 25	, 2009
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1. CHEMICAL PRODUCT IDENTIFICATION		
1.1 Product Name	Vegarol® 1216	
1.2 Common Chemical Name	Blend of lauryl myristyl alcohol, cetyl alcohol, fatty alcohol 1214; blend of N-dodecanol, tetra decanol and 1-hexa decanol; alcohol C12-16	
1.3 Product Code (Supplier)	Vegarol® 1216	

2. COMPOSITION / INFORMATION ON INGREDIENTS		
2.1 Chemical Name	Blend of 1-dodecanol (lauryl alcohol), 1-tetrea decanol	
	(myristyl alcohol) and 1-hexadecanol (cetyl alcohol)	
2.2 % Compound	100	
2.3 CAS Number	68855-56-1	
2.4 EINECS Number	272-490-6	

3. HAZARD IDENTIFICATION		
3.1 Environmental Hazards	None identified	
3.2 Human Health Hazards, Effects, and Symptoms:		
3.3 Ingestion	May cause slight irritation to gastrointestinal tract	
3.4 Inhalation	No harmful effect expected at ambient temperature. Mist or vapours of the product may cause irritation to the pulmonary tract	
3.5 Skin Contact	Causes slight irritation	
3.6 Eye Contact	Causes mild transient irritation	

4. FIRST AID MEASURES		
4.1 Ingestion	Consult a doctor immediately. Drink plenty of water. Do not induce vomiting. 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
<ul><li>c. Special Fire Fighting</li><li>Procedures</li></ul>	Wear self-contained breathing apparatus and protective clothing to avoid direct contact with



5. FIRE FIGHTING MEASURES		
	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 / 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, face mask and rubber boots	

6. ACCIDENTAL RELEASE MEASURES		
6.1 Personal Precautions	No particular precautions. Observe 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	

7. HANDLING AND STORAGE	2
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	HDPE carbuoys, stainless steel tanks, zinc coated tanks or lacquer lined MS drums
7.4 Unsuitable Packing Material	Unlined MS drums

8. EXPOSURE CONTROLS / PERSONAL PROTECTION		
8.1 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	
8.2 Skin and Body Protection	Uniform, apron and rubber boots	
8.3 Hand Protection	Rubber gloves	
8.4 Eye Protection	Safety goggles and face mask	

9. PHYSICAL AND CHEMICAL PROPERTIES		
9.1 Physical State	Liquid above 25 <sup>0</sup> C	<u>,</u>
9.2 Colour	Colourless	
9.3 Odour	Characteristic fatty alcohol odour	
9.4 Boiling Range	255 to 305°C	
9.5 Melting Range	18 to 25 <sup>0</sup> C	



9. PHYSICAL AND CHEMICAL PROPERTIES		
9.6 Solubility in Water	Insoluble in water	
9.7 Density, Gm/ml	$0.8203 \text{ at } 40^{0}\text{C}$	
9.7 Solubility in Oil and Solvents	Not available	
9.8 Vapour Density (Air = 1)	Not available	
9.9 Vapour Pressure, mm of Hg	< 10 mm, at 22 <sup>o</sup> C	
9.10 Flash Point	Approximately 137°C, PMCC	
9.11 Auto Ignition Temperature	Not available	
9.12 Lower Explosion Limit	Not available	
9.13 Upper Explosion Limit	Not available	
9.14. Average Molecular Weight	193 - 200	
9.15. Viscosity	Approximately 10 mPa.s at 38 <sup>o</sup> C	

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 INFOR	MATION
11.1 Acute Toxicity:	
11.2 Oral (LD50) (Rat)	> 20.5 g/kg
11.3 Dermal (LD50) (Rabbit)	Not available
11.4 Inhalation (LC50)	Not available
11.5 Skin Irritation	No irritation observed in human beings through repeated insult tests conducted using the product undiluted
11.6 Eye Irritation	Mild transient irritation. Mild irritation observed in rabbits at 500 mg dosage level of undiluted product
11.7 Sensitization	Not available
11.8 Chronic Toxicity	Not available
11.9 Carcinogenicity	Not available

12. ECOLOGICAL INFORMATION		
12.1 Comment	This product is very easily biodegradable (90%) and	
	does not cause difficulties in waste water treatment	
÷	plants. Since it is insoluble in water 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 CONSIDE	RATIONS
13.1 Methods of Disposal	Disposal methods should be in accordance with local, federal
	and state environmental regulations



14.TRANSPORT INFORMATION	
14.1 UN Number	
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 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	

<b>16. OTHER INFORMATION</b>	· ·	· · · · · · · · · · · · · · · · · · ·	
16.1 REACH Pre-Registration Number		05-2115153110-68-0000	
16.2 Legend		Not applicable; not available	
16.3 History:			
a. Date of First Issue	July 20, 2004		
b. Date of Last Issue	June 25, 2007		
c. Date of Current Issue	May 25, 2009		Version 1.03
MSDS Prepared By	Dr.	Dr. Kashinath Pandit	
MSDS Authorized By	Dr. Kashinath Pandit		

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