



VVF (India) Limited



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SAFETY DATA SHEET

Product Name : Vegarol [®] 1214	Version : 2.00	Date: Jan 1, 2015
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1. CHEMICAL PRODUCT IDENTIFICATION	
1.1 Product Name	Vegarol [®] 1214
1.2 Common Chemical Name	Lauryl Myristyl alcohol, Fatty alcohol C1214, Blend of N-dodecanol, tetra decanol; Alcohol 10-16
1.3 Product Code (Supplier)	Vegarol [®] 1214
1.4 Application of the substance / the preparation usages	Mining, (without offshore industries), offshore industries, agriculture, forestry and fishery. Manufacture of textiles, leather, fur, pulp, paper and paper products, bulk, large scale chemicals (including petroleum products), fine chemicals, rubber products, plastics products, including compounding and conversion, fabricated metal products, except machinery and equipment, manufacture of furniture. Manufacture of other non-metallic mineral products, e.g. plasters, cement. Formulation [mixing] of preparations and/or re-packaging (excluding alloys). General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment Used in building and construction work. Used as solvent. Used as degrease cold degreasing.
1.5 Manufacturer/Supplier:	VVF (India) Limited, 109, Sion (E) MUMBAI – 400022
1.6 Emergency contact details	+ 91-22-9619551607

2. HAZARD IDENTIFICATION	
2.1 Hazard pictograms	  GHS07 GHS09
2.2 Signal word	Warning
2.3 Hazard statements	H319 Causes serious eye irritation H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects
2.4 Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read label before use. P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment. P264 Wash thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
2.5 Human Health Hazards, Effects and Symptoms:	
2.5.1 Ingestion	May cause slight irritation to gastrointestinal tract
2.5.2 Inhalation	No harmful effect expected at ambient temperature. Mist or vapours of the product could cause irritation to the pulmonary tract
2.5.3 Skin Contact	May cause slight irritation



2.5.4 Eye Contact	May cause mild, transient irritation
2.6 Other Hazard Results of PBT and vPvB assessment	This product is not PBT or vPvB.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Chemical Name	Blend of 1 dodecanol (Lauryl alcohol) and 1-tetra decanol (Myristyl alcohol)		
Name	CAS No.	EINECS No	% by Weight
Decan-1-ol	112-30-1	203-956-9	2.0 Max
N-dodecanol	112-53-8	203-982-0	70 - 78
Tetradecanol	112-72-1	204-000-3	22 - 30
Hexadecan-1-ol	36653-82-4	253-149-0	2.0 Max
Octadecanol	112-92-5	204-017-6	

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 persist 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 face mask

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 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. wash 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 acids and oxidising agents
7.2 Storage	Store in sealed containers in a cool and dry place



7.3 Suitable Materials	Packing	HDPE carbuoys, stainless steel tanks, Zinc coated tanks or lacquer lined MS drums
7.4 Not Suitable Material	Packing	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
8.1 Respiratory System Protection	None required when adequate ventilation is available at ambient temperature. In presence of mist or vapours, use self-contained NIOSH/MSHA approved respirator
8.2 Skin and Body Protection	Uniform, apron and rubber boots
8.3 Hand Protection	 <i>Protective gloves</i> <i>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.</i> <i>Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.</i> <i>Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation</i> Material of gloves Nitrile (0.35mm thick) or Butyl (0.5 mm thick) gloves or gloves tested to EN 374. Penetration time of glove material <i>The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.</i>
8.4 Eye Protection	 <i>Tightly sealed goggles</i>

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Physical State	Liquid above 22 ⁰ C
9.2 Colour	Colourless
9.3 Odour	Characteristic fatty alcohol odour
9.4 Boiling Point	> 177 ⁰ C at 760 mm of Hg
9.5 Melting Range	17 to 23 ⁰ C
9.6 Solubility in Water	Insoluble in water
9.7 Density, Gm/ml	0.8203 at 40 ⁰ C
9.8 Solubility in Oil and Solvents	Not available
9.9 Vapour Density (Air = 1)	Not available
9.10 Vapour Pressure, mm of Hg	< 10 mm at 22 ⁰ C
9.11 Flash Point	143 ⁰ C 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	190 – 197
9.16. Viscosity	10 mPa.S at 38 ⁰ C

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 flames

**10 STABILITY AND REACTIVITY**

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.	LD50(Oral)	LD 50(Dermal)	LC 50(Inhalative)(6h)
N-dodecanol	112-53-8	>2000 mg/kg (rat)	1500-12000 mg/kg (rabbit)	> 1.05 mg/L air (rat)
Tetradecanol	112-72-1	>2000 mg/kg (rat)	8000 mg/kg bw (rabbit)	> 1.5 mg/L air (rat)

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

Toxicity for reproduction:

Name	CAS. NO.	Carcinogenicity	Mutagenicity	Rat, Fertility
N-dodecanol	112-53-8	Non carcinogenic	Non-mutagenic	NOAEL = 2000 mg/kg
Tetradecanol	112-72-1	Non carcinogenic	Non-mutagenic	Not expected to impair fertility

11.3 Skin Irritation	No irritation in human beings observed in repeated insult tests conducted using undiluted product.
11.4 Eye Irritation	Causes mild transient irritation. Mild irritation observed in rabbits at 500 mg dosage level of undiluted product
11.5 Sensitisation	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 Information about elimination (persistence and degradability)	The substance is biodegraded in aquatic and terrestrial environment under aerobic and anaerobic conditions.
12.2.1 Biodegradation:	

Name	CAS. NO.	Method	Result
N-dodecanol	112-53-8	301B	% degradation: 69% in 28 days at 15.4 mg/l ; 10 day window: 63%
Tetradecanol	112-72-1	301B	% degradation: 82.2% in 28 days at 15.9 mg/l ; 10 day window: 77.2%
Alcohols, C12-14	80206-82-2	BODIS 79	% degradation: 97% in 28 days at 100 mg/l; 10 day window : >60%

12.3 Mobility and bioaccumulation potential:

12.3.1 Bioaccumulation:

Name	CAS. NO.	Log Kow	BCF
N-dodecanol	112-53-8	5.36	67
Tetradecanol	112-72-1	6.03	190

Remark: Available data indicates that the long chain alcohols are non-bio accumulative.

12.4 Ecotoxicological effects





Name	CAS No.	EC 50	EC 50 48 Hr Er	C50 72 Hr LC	50 96 Hr	NOEC
N-dodecanol	112-53-8	0.62 mg/L (biomass) (Algae) (2.6 mg/L (growth))	0.77 mg/L (n) (Daphnia Magna (Water Flea))	0.33 mg/L (n) (Desmodesmus subspicatus)	1.0 mg/L (m) (Fish Pimephales Promelas)	0.085 mg/L (n) (Desmodesmus subspicatus) (Biomass)
Tetradecanol	112-72-1	Effects seen >LOS (Algae)	3.2 mg/L (>LoS) (Daphnia Magna (Water Flea))	-----	> 1 mg/L (n) (>LoS) (Fish Salmo gairdneri)	---

Remark : Very toxic for fish

13 DISPOSAL CONSIDERATIONS

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

14.1 UN-Number · ADR, IMDG, IATA	UN3082
14.2 UN proper shipping name · ADR · IMDG · IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dodecan-1-ol, tetradecanol) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dodecan-1-ol, tetradecanol), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dodecan-1-ol, tetradecanol)
14.3 Transport hazard class(es) · ADR, IMDG, IATA	
 	
Class · Label	9 Miscellaneous dangerous substances and articles. 9
14.4 Packing group · ADR, IMDG, IATA	III
14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: dodecan-1-ol, tetradecanol Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	



· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dodecan-1-ol, tetradecanol), 9, III

15. REGULATORY INFORMATION

15.1 EEC Regulations	The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous
15.2 Others	According to available data, fatty alcohol is not a dangerous chemical. However, one should observe the usual precautionary measures for dealing with chemicals according to local, state and federal regulations and requirements

16. OTHER INFORMATION

REACH Registration number (under multiple registrations)		
Dodecan-1-ol	01-2119485976-15-0011	
Tetradecanol	01-2119485910-33-0011	
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 : 2.00
SDS Authorised by	Mr. C.R. Marathe	

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