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MATERIAL SAFETY DATA SHEET

Product Name : Glycerine CP / Glycerine JP / Glycerine BP/ Glycerine IP / Glycerine USP	
Version: 2.00	Date: 25 May 2013

1. CHEMICAL PRODUCT IDENTIFICATION	
1.1 Product Name	Glycerol / Glycerine
1.2 Common Chemical Name	Glycerol / Glycerine
1.3 Product Code (Supplier)	Glycerol / Glycerine CP / Glycerine JP / Glycerine BP/ Glycerine IP / Glycerine USP

2. COMPOSITION / INFORMATION ON INGREDIENTS	
2.1 Chemical Characterization (Substance)	Glycerol, Glycerol, Glycerine, 1,2,3-Propanetriol
2.2 CAS Number	56-81-5
2.3 EINECS Number	200-289-5
2.4 Formula	C ₃ H ₈ O ₃

3. HAZARD IDENTIFICATION	
3.1 Environmental Hazards	Product is biodegradable
3.2 Human Health Hazards, Effects and Symptoms:	
3.2.1 Ingestion	Harmful only in large quantity
3.2.2 Inhalation	Presence of mist or vapours respiratory track may experience irritation
3.3.3 Skin Contact	Not irritant, Avoid heated product
3.3.4 Eye Contact	Not irritant. Avoid heated product

4. FIRST AID MEASURES	
4.1 Inhalation	Take affected person into open air
4.2 Skin Contact	Remove contaminated clothing and wash thoroughly with soap and water
4.3 Swallowing	Don't give anything through mouth and seek medical attention
4.4 Eye Contact	Immediately flush eyes with a direct stream of water for at least 15 min. and seek medical attention
Notes to Doctor: There is no antidote. Use supportive care	

5. FIRE FIGHTING MEASURES	
5.1 Extinguishing Media	
a. Suitable	Water fog, alcohol resistant foam, carbon dioxide
b. Not Suitable	Not available
c. Special Fire Fighting Procedures	In case of high temperature or fire, use a water jet to cool the tank containing the product



5. FIRE FIGHTING MEASURES	
5.2 Unusual Fire or Explosion Hazards	Avoid contact of glycerine with of glycerine with strong oxidizing agents, mineral acid as the same may cause explosion.
5.3 Hazardous Thermal Decomposition	At high temp. it decomposes and may form a corrosive gas ' acrolein'
5.4 Protection for Fire-Fighters	Wear self-contained breathing apparatus and protective clothing to avoid direct contact with eyes and skin

6. ACCIDENTAL RELEASE MEASURES	
6.1 Personal Precautions	Wear personal protection gear. 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. Flush affected area with water & detergent

7. HANDLING AND STORAGE	
7.1 Handling	Follow good hygiene and safety procedures. Avoid any direct eye &/or skin contact with the product. Wash hands with soap and water after handling the product.
7.2 Storage	Store in sealed containers in a cool and dry place, away from heat, strong acids and oxidising agents
7.3 Suitable Packing Materials	Stainless steel, HM-HDPE drums and Lacquer coated drums.
7.4 Unsuitable Packing Material	Unlined MS drums

8. EXPOSURE CONTROLS / PERSONAL PROTECTION	
8.1 Ventilation / Engineering Controls	Use adequate ventilation to keep airborne Concentration low. Avoid inhalation of vapour
8.2 Respiratory 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
8.3 Skin Protection	Use Uniform, apron and rubber boots
8.4 Eye Protection	Use goggles or face mask
8.5 Other Protective Equipment	Use safety shoes

9. PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Molecular Weight	92
9.2 Specific Gravity	1.2607gm/cc at 25 ⁰ C
9.3 Gas Density	Not available
9.4 Liquid Density	Not available
9.5 Vapour Pressure	Not available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

9.6 Solubility in Water	Soluble in water
9.7 Percent Volatiles by Volume	Not available
9.8 Evaporation rate	Not available
9.9 pH	Neutral
9.10 Sublimation point	Not available
9.11 Appearance, Odour and State	Clear colorless liquid slight characteristic odor
9.12 Flash point and Method	>198.9°C PMCC

10 STABILITY AND REACTIVITY

10.1 Chemical Stability	Stable under normal operational conditions
10.2 Conditions to Avoid	Sources of heat, ignition and flames, moisture
10.3 Materials to Avoid	Strong acids and oxidising agents
10.4 Hazardous Polymerisation Products	None
10.5 Hazardous Decomposition Products	Release corrosive gas acrolein at high temperature

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity	
a. Oral (LD50) (Rat)	17000 – 27200 mg/kg
b. Dermal (LD50) (Rabbit)	Not available
c. Inhalation (LC50)	Not available
d. Skin Irritation	Not irritation
e. Eye Irritation	Not irritating
f. Carcinogenicity	Not reported

12. ECOLOGICAL INFORMATION

12.1 Comment	Readily biodegradable (OECD 301)
12.2 Eco-Toxicity	Data not available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method	Reprocess or dispose off in accordance with local, state and federal regulation in an approved area.
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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 ADN 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 EEC directive
15.2 Inventory status	AUSTR, CHINA, EINECS, DSL, JAPAN, KOREA, PHIL, New Zealand, TSCA and Switzerland
15.2 Others	According to available data, the product is not regulated. However, one should observe prescribed federal, state and local measures while dealing with chemicals

16. OTHER INFORMATION

16.1 REACH pre-registration no :	05-2116454366-41-0000	
16.2 Legend	N.A. =Not applicable; N.Av.= Not available	
16.3 History		
a. Date of first issue	July 20, 2004	
b. Date of last issue	May 25, 2009	
c. Date of current issue	May 25, 2013	Version : 2.00
MSDS Authorised By	Dr. Kashinath Pandit	

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