

MATERIAL SAFETY DATA SHEET

1. CHEMICAL IDENTITY

Chemical Name / Synonyms : Strong acid cation Exchange Resin & Strong Base Anion Exchange Resin		Chemical Classification : Non-Hazardous	
		Trade Name : Tulsion MB-105	
Formula : N. A.	C.A.S. No. : N.A.	U. N. No. : N. A.	Ionic Form : Hydrogen & Hydroxide
Regulated Identification		Shipping Name : N.A. Codes / Label	Hazchem No. : N. A.
		Hazardous waste I. D. No. : N. A.	
Hazardous Ingredients*		C.A.S. No.	Amount %
1. Mixture of Strong acid cation Exchange Resin & Strong Base Anion Exchange Resin		Non hazardous	40 - 45
2. Water		7732 - 18 - 5	55 - 60
			NE = None Established

* As defined in 29 CFR 1910.1200

2. PHYSICAL AND CHEMICAL DATA

Physical State : Solid	Vapour Density (Air = 1) : N. A.
Appearance : Spherical beads	Vapour pressure @ 35 °C, mm Hg : N. A.
Boiling Point : N. A.	Solubility in water @ 30°C : Insoluble
Melting Point : N. A.	Specific Gravity (H₂O = 1) : 1.1 to 1.2
Freezing Point : N. A.	Evaporation Rate (B. A. = 1) : N. A.
Odour : Nil	% Volatiles : 55 - 60
pH : 5 - 9	

3. FIRE AND EXPLOSION HAZARD DATA

Flammability No	LEL % N. A.	Flash Point ° C N. A.	Auto - ignition temp. 427 °C / 800 Deg. F
TGD Flammability N. A.	UEL % N. A.	Flash Point ° C N. A.	(Hazardous) combustion products
Explosion Sensitivity to impact : Nil			
Explosion Sensitivity to Static Electricity : Nil			

Hazardous Polymerisation		: Will not occur
Combustible Liquid : N. A.	Explosive Material : N. A.	Corrosive Material : N. A.
Flammable Material : N. A.	Oxidiser : N. A.	Others : N. A.
Pyrophoric Material : N. A.	Organic Peroxide : N. A.	

4. REACTIVITY DATA

Chemical Stability	: Chemically stable. Avoid temperatures above 220° C / 428 Deg. F
Incompatibility with other material	: Avoid strong oxidising agents such as Nitric acid.
Reactivity	: N. A.
Hazardous reaction products	: N. A.

5. HEALTH HAZARD DATA

Routes of Entry	Effects of Exposure / Symptoms	Emergency Treatment		
Eye	Solid or Dust may cause irritation or Corneal injury due to mechanical action.	Wash thoroughly with water		
Skin Contact	Prolonged or repeated exposure not likely to cause any significant skin irritation	N. A.		
Skin Absorption	Skin absorption is unlikely due to physical properties.	N. A.		
Inhalation	Vapours are unlikely due to physical properties.	N. A.		
Ingestion	Single dose Oral LD ₅₀ has not been determined. Single dose Oral toxicity is believed to be low. No hazardous anticipated from ingestion incidental to industrial exposure.			
Systemic and other effects	No specific data available. However repeated exposure is not anticipated to cause any significant adverse effects.			
TLV (ACGIH) : N. A.		STEL : N. A.		
Permissible Exposure Limit LD₅₀ : N. A.		Odour Threshold LD₅₀ : N. A.		
NFPA Hazard Signals : N. A.	Health N. A.	Flammability Non flammable	Stability Chemically stable	Special N. A.

6. PREVENTIVE MEASURES

Personnel Protective Equipment :	Face mask , Impervious gloves , Splash goggles , Eye washer
Handling and Storage Precautions :	Store in a cool enclosed place. Avoid repeated freeze – thaw cycles.

7. EMERGENCY AND FIRST AID MEASURE

FIRE	Fire Extinguishing Media :	Dry Chemical , CO ₂ , Water fog
	Special Procedures :	Wear MSHA / NIOSH approved , pressure demand self contained breathing apparatus / equipment.
	Unusual Hazards :	N. A.
EXPOSURE	First Aid Measures :	N. A.
	Antidotes / Dosages :	N. A.
SPILLS	Steps to be taken :	Sweep up immediately.
	Waste Disposal Method :	<ol style="list-style-type: none">1. Landfill / Incineration2. New material may be disposed off as ordinary trash.3. Used material which has been contaminated with heavy metals or toxic substances must be treated as such.4. Disposal must be made in accordance with all local state and federal regulations.

8. ADDITIONAL INFORMATION

Do not pack column with dry resin. Dry beads expand when wetted , which may cause glass column to shatter.
Strong oxidising agents such as Nitric acid can cause explosive reactions. Nitric acid regeneration should be carried out by experienced personnel only.

9. MANUFACTURER / SUPPLIERS DATA

Thermax Limited , Chemical Division , Village Paudh , Post Majgaon , Taluka Khalapur ,	Contact Person In Emergency : Factory Manager
	Local Bodies involved : N. A.

Dist. Raigad 410206 , India Phone : 011/91/020/7120181/7120169 Fax : 011/91/020/7120206	Standard Packing : As per mentioned in literature leaflet
	Tremcard Details / Ref. N. A.
	Others : N. A.

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