NAPHTHA

MATERIAL SAFETY DATA SHEET

1. IDENTITY OF MATERIAL

Product Name :**Naphtha, Light Naphtha**		Chemical Designation : **Complex Mixture of Hydrocarbons**	
Trade Name: **Naphtha**		Synonyms : **Petroleum Naphtha, Petroleum ether**	
Formula : **Complex Mixture of hydrocarbons**	Label : **Flammable Liquid Category Class:3**	CAS Number : **8030-30-6**	UN Number : **1255**
Regulated Identification: **UN Number 1255**	Shipping Name Codes / Label : **Class-A Flammable Liquid Exits in Vapour form at Ambient Temperature**		Hazchem Code : **3Y, 3YE**

2. PHYSICAL AND CHEMICAL PROPERTIES

Physical State : **Liquid (Vapour at ambient Temperature.**)	Boiling Point in ° C.: **40° C-80° C**	Vapour Pressure at 35° C **: ---**
Appearance(Colour) : **Straw coloured to colourless**	Melting / Freezing Point in ° C: **----**	Evaporation rate at 30 ° C: **---**
Odour: **characteristic smell. (Acrid)**	Vapour Density (Air-1): **2.264 (Heavier Than Air)**	Solubility in water at 30 ° C : **Insoluble in water.**
Others (Corrosivity, Etc) : ---	Specific Gravity (Water-1) : **0.6-0.7 (Lighter Than Water)**	PH : **Neutral.**

3. FIRE AND EXPLOSIVE HAZARDS DATA

Explosion / Flammability : **Highly flammable moderately explosive**	Flash Point : **-20° C to -50° C (Exists in the form of Vapor at ambient Temperature)**	Flammability Range (LEL to UEL) : **1.1%to5.9%**	Autoignition Temperature degree C : **531°C**

4. REACTIVE HAZARDS

	Impact : **Stable**	Hazardous Combustion Products : **Carbon Di-oxide (CO_2), Carbon Monoxide (CO)**
Stability to	Static Discharge : **Can Ignite**	(Hazardous Decomposition Products) : **No**

	Reactivity : **With Oxidisers**	(Conditions to avoid): **Avoid Contact With Oxidizers**
Hazardous Polymerization	**May Not Occur**	

5. HEALTH HAZARD DATA

Routes of Entry : (**Inhalation, Skin, Mucous Membranes, Eye Contact and Ingestion**)

Effects of Exposure / Symptoms: **Acts As Anesthetic, Cause Dermatitis Irritation.**

LD 50 (in rat Orally or percutaneous absorption) (mg / kg body weight) **---**

LC 50 (in rat) (mg/1/ hour.) **---**

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	ppm	mg /cu. m.		ppm	mg / cu. m
Permissible Exposure Limit (PEL)	**100**	**---**	Short Term exposure Limit(STEL)	**----**	**-----**
Threshold Limit Value(TLV) of ACGIH	ppm **500**	mg/cu. m **----**	Odour Threshold	ppm **----**	mg / cu.m **----**

Emergency Treatment : **Remove Victim From Contaminated Atmosphere To Fresh Air, Start Artificial Respiration In Case Of Breathing Difficulties.**

6. HAZARD SPECIFICATION

NFPA HAZARD **SIGNAL**	HEALTH **1**	FLAMMABILITY **3**	STABILITY **0**	SPECIAL **0**

Known Hazards

Combustible Liquid : **Yes**	Water Reactive Material : **No**	Irritant : **No**
Flammable Material :**Yes**	Oxidiser: **No**	Sensitizer : **No**
Pyrophoric Material :**No**	Organic Peroxide: **No**	Carcinogen : **No**
Explosive Material :**Yes**	Corrosive Material: **No**	Mutagen : **No**
Unstable Material :**No**	Compressed Gas: **Yes**	Others (Specify) : **No**

7. SAFE USAGE DATA

Ventilation :	**General**
Personal Protective Equipments(PPE'S):	Non Respiratory PPE'S : Eyes : Safety Goggle, Face shield, or Hood Body: PVC clothing. Gloves : **Neoprene, Polyvinyl Chloride(PVC)**
	Respiratory (Specify): **Emergency Life Saving Apparatus(ELSA), Self Contained Breathing Apparatus(SCBA).**
Precautions	Handling & Storage : **Should Be Stored Inair Tight Closed Containers Away From Source Of Ignition, With Protection Against Static Discharges.**

8. EMERGENCY RESPONSE DATA

	Fire Extinguishing Media :**3% Aquous Film Forming Foam(AFFF), Dry Chemical Powder(DCP),Carbon Di Oxide(CO_2,)**
Fire	Special Procedures :**Water Spray May Be Used To Cool Containers Or Exposed Equipments.**
	Unusual Hazardous :**----**
Exposure (Skin and eye contact, inhalation, Ingestion)	First Aid Measure: **Remove Victim To Fresh Air. Seek Medical Help.**
Spills	Steps to be taken : **Collect In Container.**
	Waste disposal method : **On Large Scale Absorb And Landfill. Allow For Atmospheric Evaporation.**

9. ADDITIONAL INFORMATION (DOS & DON'T)

- Incase of leaks monitor %LEL, Stop all hot jobs. Stop traffic/vehicular movements and dilute vapor cloud with water spray.
- Evacuate on downwind side.
- Stop activities of hot jobs in units / plants on down wind direction.
- Look for wind direction.
- Approach from upwind side.
- If caught on downwind, move perpendicular to wind direction and assemble at nearest safe assembly point.
- Arrest leak if without risk.
- Cordon off the area.
- Use Self Contained breathing apparatus set in case of Fire.
- Contain leaking liquid on sand or earth.
- Do not Panic.
- Do not enter without knowing the wind direction.
- Do not approach leaking / affected area without proper respiratory protection.
- Do not approach from downwind direction
- Do not run.

- Do not move along or opposite to the direction of wind.
- Do not allow unauthorized personnel.

10. SOURCES USED

1. Hazardous Chemicals ready reference by Richard .J. Lewis SR
2. Occupational Health & Safety. P.Cook

11. MANUFACTURER / SUPPLIER DATA

<table>
<tr><td>Firm's Name: Mangalore Refinery & Petrochemicals Ltd.</td><td>Standard Packing : Transporation In Bulk Tanker of 12 T,16 T, 18T Capacities, Ship, Pipelines.</td></tr>
<tr><td>Mailing Address: At P.O Kuthethoor, Mangalore-575030 (D.K.)</td><td rowspan="7">Emergency Telephone During Transit :(0824)2270400</td></tr>
<tr><td>Telephone Number:(0824)2270400</td></tr>
<tr><td>TeleFax. Number :(0824)2270013</td></tr>
<tr><td>Contact Persons In Case of Emergency:</td></tr>
<tr><td>Head(Operations)
TEL: :(0824)2270400,Ext(O)2440,(R)4440</td></tr>
<tr><td>Head-Marketing
TEL: :(0824)2270400, Ext(O)2107</td></tr>
<tr><td>Fire & Safety ,Control Room
TEL: :(0824) 2270279, 2270400,Ext-2333/3333,2555</td></tr>
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