

**SULPHUR**  
**MATERIAL SAFETY DATA SHEET**

**1. IDENTITY OF MATERIAL**

Product Name : <b>Sulphur</b>		Chemical Designation : <b>Sulphur</b>	
Trade Name : <b>No</b>		Synonyms : <b>No</b>	
Formula : <b>S</b>	Label : Category Class <b>4.1</b>	CAS Number : <b>7704-34-9</b>	UN Number: <b>1350</b>
Regulated Identification : <b>UN Number 1350</b>	Shipping Name Codes / Label : <b>Combustible, Toxic Solid.</b>		Hazchem Code : <b>2 (Z)</b>

**2. PHYSICAL AND CHEMICAL PROPERTIES**

Physical State : Solid / Liquid	Boiling Point in Degree C.: <b>444.6 °C</b>	Vapour Pressure at 35 degree C : <b>1mm Hg</b>
Appearance(Colour) : <b>Yellow Powder or Rhombic Powder (Crystals)</b>	Melting Point in degree C : <b>119 °C</b>	Evaporation rate at 30 degree C: ----
Odour : <b>No</b>	Vapour Density ( Air-1) : ---	Solubility in water at 30 degree C <b>Insoluble</b>
Others (Corrosivity, Etc) : <b>Corrosive</b>	Specific Gravity (Water-1): <b>2.07</b>	PH: <b>Acidic to Neutral.</b>

**3. FIRE AND EXPLOSIVE HAZARDS DATA**

Explosion / Flammability : <b>Combustible.(Dust can be explosive.)</b>	Flash Point ° C: <b>207.2 ° C</b>	Explosive range (dust suspended in air): <b>35-1400 g/m<sup>3</sup></b>	Autoignition Temperature ° C: <b>232° C</b>
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**4. REACTIVE HAZARDS**

	Impact : <b>Stable.</b>	Hazardous Combustion Production) : <b>SO<sub>2</sub>, H<sub>2</sub>S</b>
Stability	Static Discharge : <b>Yes.</b>	(Hazardous Decomposition Production) : <b>No</b>

	Reactivity : <b>Can react violently with carbides, halogens.</b>	(Conditions to avoid): <b>Avoid contact with carbides, halogens.</b>
Hazardous Polymerization	<b>May Not Occur.</b>	

## 5. HEALTH HAZARD DATA

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

Effects of Exposure / Symptoms: Contact with Skin and eye cause irritation.

LD 50 ( in rat) Orally or percutaneous absorption) (mg / kg body weight) ----- LC 50 (in rat) (mg/l)/ hour. ----

Permissible Exposure)	ppm	mg /cu. m.	Short Term	ppm
mg /cu. m			Exposure	
Limit (PEL)	<b>5</b>	<b>10</b>	Limit(STEL)	<b>5</b>
<b>10</b>				
Threshold Limit		ppm	mg/cu. m	Odour
ppm				
Value(TLV) of ACGIH	<b>2</b>	<b>5</b>	Threshold	<b>---</b>
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Emergency Treatment : **Wash with running water.**

## 6. HAZARD SPECIFICATION

NFPA HAZARD SIGNAL	HEALTH <b>2</b>	FLAMMABILITY <b>1</b>	STABILITY <b>0</b>	SPECIAL <b>0</b>
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### Known Hazards

Combustible Liquid : <b>No</b>	Water Reactive Material : ----	Irritant : <b>Yes</b>
Flammable Material: <b>Yes</b>	Oxidiser: <b>No</b>	Sensitizer: <b>No</b>
Phrophoric Materia: <b>No</b>	Organic Peroxide: <b>No</b>	Carcinogen: <b>No</b>
Explosive Material : <b>Yes</b>	Corrosive Material : <b>Yes</b>	Mutagen: <b>No</b>

Unstable Material No	Compressed Gas : <b>No</b>	Others (Specify) : <b>No</b>
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## 7. SAFE USAGE DATA

Ventilation	<b>General</b>
Personal Protective Equipment Required	Eyes (Specify) : <b>Safety Goggle/ Face Shield.</b>
	Respiratory (Specify) : <b>Dust Mask</b>
	Gloves (Specify) : <b>PVC / Rubber Gloves</b>
	Clothing (specify) : <b>Boiler Suit</b>
Precautions	Handling & Storage Others ( Specify) : <b>Store In Cool, Dry Ventilated Separate Area Away From Source Of Ignition.</b>

## 8. EMERGENCY RESPONSE DATA

	Fire Extinguishing Media : <b>Water spray, Dry Chemical Powder(DCP), Carbon Dioxid(CO<sub>2</sub>)</b>
Fire	Special Procedures : <b>Use Self Contained Breathing Apparatus Set While Fire Fighting.</b>
	Unusual Hazards : <b>Causes Irritation Due To Contact With Dust.</b>
	First Aid Measures : <b>Wash Contacted Body Parts With Running Water.</b>
Spills	Steps to be taken : <b>Collect Physically.</b>
	Waste disposal method : <b>Smaller Quantity Can Be Land Filled.</b>

## 9. ADDITIONAL INFORMATION (DOS & DON'T)

- Use proper Respiratory Protection (Dust mask ) & Safety goggle while handling
- Ensure Storage at ventilated and specified area away from heat & source of ignition.
- Wash contacted body part with plenty of water.
- Do not allow vehicles and unauthorized personnel .

## 10. SOURCES USED

Chemical safety data sheets – Royal Society of Chemistry.

Hazardous chemicals by – Richard. J. Lewis SR Desk Reference.

Occupational Health Hazard by Peter. B. Cook

**11. MANUFACTURER / SUPPLIER DATA**

<b>Firm's Name: Mangalore Refinery &amp; Petrochemicals Ltd.</b>	<b>Standard Packing : Bulk Load(Truck) 10 to 18 MT..</b>
<b>Mailing Address: At P.O Kuthethoor, Mangalore-575030 (D.K.)</b>	<b>Emergency Telephone During Transit : (0824)2270400</b>
<b>Telephone Number:(0824)2270400</b>	
<b>TeleFax. Number :(0824)2270013</b>	
<b>Contact Persons In Case of Emergency:</b>	
<b>Head(Operations) TEL: :(0824)2270400,Ext(O)2440,(R)4440</b>	
<b>Head-Marketing TEL: :(0824)2270400, Ext(O)2107</b>	
<b>Fire &amp; Safety ,Control Room TEL: :(0824) 2270279, 2270400,Ext-2333/3333,2555</b>	