

### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name	:	LIME SULPHUR
Common Name	:	Calcium sulfide (Ca(Sx))
IUPAC Name	:	sulfur
Chemical Abstracts Name	:	Calcium polysulfide
CAS No.	:	1344-81-6
Chemical formula	:	S
Molecular weight	:	32.07
Chemical Family	:	Inorganic salt solution
Use	:	Fungicides
Company Name	:	HPM Chemicals & Fertilizers Ltd.
Address	:	209-210, Anupam Bhawan, Azadpur Commercial Complex, Azadpur, Delhi- 110033
Phone No.	:	(011)-45071800
Fax No.	:	(011)-27681800
E-mail	:	info@hpmindia.com
Website	:	www.hpmindia.com

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Content % (w/w)
Calcium polysulfide	1344-81-6	29 %
Inerts		71%

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	3.	HAZARDS IDENTIFICATION
Health Hazards	:	When Lime sulphur gets on the skin, it can cause skin
		sensations like tingling, itching, burning, or numbness
		at that spot. These sensations usually go away within
		48 hours. Lime sulphur can be mildly irritating if it
		gets in the eye.
Emergency	:	Warning! Keep out of reach of children. Toxic if
		swallowed and inhaled. Contact can cause eye or skin
		irritation.
Skin and Eyes	:	Avoid contact with mouth, skin and eyes.
Entry route	:	Ingestion, Inhalation, Contact with eye or skin.
Symptoms of poisoning	:	Nasal discharge, Itching, Vomiting, eyes redness,
		anxiety and convulsions.

	4. FIRST AID MEASURES
Ingestion	: Do not induce vomiting. Wash out mouth with plenty of water. Rinse mouth before giving glass of water. Never give anything by mouth to an unconscious person. If breathing is difficult, give oxygen get medical attention.
Eye	: Wash off with plenty of water if pain persists, consult an eye specialist
Skin	: Remove affected clothing and wash all exposed skin area with soap and water followed by warm water rinse. Consult a doctor in the event of any complaints
Inhalation	: Remove victim to fresh air. Keep victim warm and at rest. If breathing is difficult, give oxygen obtain medical attention
Advice to Physician	: No specific Antidote. Treat symptomatically.
	5. FIRE FIGHTING MEASURES
Specific Hazard	: There is no risk of an explosion from this product



Extinguishing Media	:	under normal circumstances if involved in a fire. Extinguish fire using media suited to burning material. If containers are ruptured contain all runoff. CO2, Foam or dry chemical are preferred. Soft stream water fog or fine water sprays if no alternatives. Contain all runoff.
Hazard From	:	If involved in a fire, it will emit toxic and noxious
<b>Combustion products</b>		fumes of oxides of carbon, nitrogen or sulfur.
		Firefighters to wear self-contained breathing apparatus
		and suitable protective clothing if risk to of exposure
		to vapour or smoke.
Protective equipment	:	Wear full protective clothing and self-contained
		breathing apparatus. Do not breathe or contact smoke,
		gases or vapours generated.

#### 6. ACCIDENTAL RELEASE MEASURES

In Case of Emergency	:	Isolate and post spill area. Wear cotton overalls buttoned to the neck and wrist, washable hat, elbow- length PVC gloves and eye/face protection to prevent skin and eyes being affected. Evacuate unprotected and unnecessary personnel from area of spill. If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourses. Contain spill and absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as per regulations.
Clean up Procedures	:	To decontaminate spill area, tools and equipment, wash with detergent and water and add the solution to the drums of wastes already collected and label contents. Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.
	7	. HANDLING AND STORAGE

Handling : Ensure containers are kept closed until using product.



Avoid contact with eyes and skin. Wear cotton overalls buttoned to the neck and wrist, washable hat and elbow-length PVC gloves.

**Storage** : DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a room or place away from children, animals, food, feed stuffs, seed and fertilizers.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	:	Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.
Ingestion	:	DO NOT eat, drink or apply cosmetics, where there is a potential for exposure to the product.
Eye Protection	:	Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eye wash should be easily available.
Skin Protection	:	Chemical resistant gloves, coveralls socks, apron and chemical resistant foot covering should always be used while handling the product.
Respiratory protection	:	
General Protection	:	Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist. Elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES (Technical)

Colour	:	yellow crystals
Melting point	:	251 °F
Physical state	:	Liquid



Density	: 1.8 at 248 °F
Partition Coefficient	: Log Pow = $4.6 (25^{\circ}C)$

### **10. STABILITY AND REACTIVITY**

Chemical Stability	:	Stable under normal conditions
<b>Conditions to Avoid</b>	:	Heat, flames and sparks
Hazardous	:	None under normal use conditions
decomposition products		
<b>Hazardous Reactions</b>	:	None under normal processing

### 11. TOXICOLOGICAL INFORMATION (Technical)

: Oral Rat LD50: 820 mg/kg
: Dermal Rabbit LD50: > 2,000 mg/kg
: LC50 >5 mg/L air (4 hour exposure rat)
: Non irritating to skin(rabbit)
: Irritant, may cause severe damage
: Irritant

		12. ECOLOGICAL INFORMATION
For Technical-		
Bird		: Acute Oral LD50 (Bobwhite quail) >5000 mg/kg
Fish		: LC50 (96 hr) (Rainbow trout, Bluegill sunfish) >188 mg/l
Bees		: Non-toxic
		13. DISPOSAL CONSIDERATIONS
Disposal	:	This material must be disposed of as a Hazardous Waste. Disposal should be in accordance with local, nation or state rule and regulations.
Disposal of empty Containers	:	Break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not



available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

#### **14. TRANSPORT INFORMATION**

Shipping Name	:	Calcium polysulfide solution (Not regulated by DOT)
UN No.	:	3082
Class	:	9
Packing group	:	NA
Marine	:	No
pollutant		

15. REGULATORY INFORMATION			
Hazard symbol	Dangerous for the environment (N)		
Risk Phrase	<ul><li>R 23/25: toxic by inhalation and if swallowed.</li><li>R 51/53: Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.</li></ul>		
Safety phrase	<ul> <li>S2 - Keep out of the reach of children</li> <li>S36 - Wear suitable protective clothing</li> <li>S53-Avoid exposure— obtain special instructions before use</li> <li>S60 - This material and its container must be disposed of as hazardous waste</li> <li>S64 - If swallowed, rinse mouth with water (only if the person is conscious)</li> </ul>		



#### **16. OTHER INFORMATION**

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are resented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS. Accordingly, no guarantee or warrantee expressed or implied is made by HPM Chemicals & Fertilizers Ltd., as to the results to be obtained based upon the user's use of the information, nor does HPM Chemicals & Fertilizers Ltd., assume any liability arising out of user's use of the information.

Date: 15/07/2020

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