SAFETY DATA SHEET

HYDRATED LIME 90% SC

CAS No.: 1305-62-0

This Safety Data Sheet is issued by Suraj Chemicals as the distributor/supplier of record, based on manufacturer and published GHS / regulatory reference data for this substance. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

GHS Product identifier

HYDRATED LIME 90% SC
Calcium Hydroxide; Slaked Lime; Calcium Hydrate
CAS: 1305-62-0

Other means of identification

Formula: $Ca(OH)_2$ | Grade: SC (min. 90% $Ca(OH)_2$ content)

Recommended use of the chemical and restrictions on use

Relevant uses: Binding agent, filler, mineral processing, mortar, neutralising agent, pH control, reagent, soil stabilisation, water/effluent treatment. For industrial user only.

Uses advised against: All uses not specified in this section or in section 7.3.

Supplier's details

SURAJ CHEMICALS
No 92, Govindappa Naicken Street, Shiva Complex, Chennai – 600001, Tamil Nadu, India
Tel: +91 - 7092722822, +91 - 9840284032 / +91 - 44 - 25393652, 42130281
Email: sales@surajchemicals.com | Website: www.surajchemicals.com
GST No: 33ACEPV8190L1ZZ

Emergency phone number

Emergency Contact No: +91 - 7092722822, +91 - 9840284032

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS:
Classified as hazardous according to GHS criteria, in accordance with the source safety data sheet:

Skin Irrit. 2	Skin irritation, Category 2, H315
Eye Dam. 1	Serious eye damage, Category 1, H318
STOT SE 3	Respiratory tract irritation, single exposure, Category 3, H335

GHS label elements, including precautionary statements

GHS: Danger

Hazard statements

H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary statements

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical advice/attention.
P362: Take off contaminated clothing and wash before re-use.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/container in accordance with relevant regulations.

Other hazards which do not result in classification

No information provided.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances

Chemical description: Hydrated Lime (Calcium Hydroxide), 90% SC grade

In accordance with Annex 4.3.3 of the GHS, the product contains:

Identification	Chemical Name / Classification	Concentration
CAS: 1305-62-0	Calcium Hydroxide — Skin Irrit. 2: H315; Eye Dam. 1: H318; STOT SE 3: H335 – Danger	>88%
CAS: 14808-60-7	Quartz (Crystalline Silica)	<3%
CAS: 1305-78-8	Calcium Oxide	<1%
CAS: 471-34-1	Calcium Carbonate	<2%
CAS: 1344-28-1	Aluminium Oxide	<1%
CAS: 1309-42-8	Magnesium Hydroxide	<1%
CAS: 1309-48-4	Magnesium Oxide	<1%
CAS: 1309-37-1	Iron Oxide (Fe_2O_3)	<0.5%
—	Other impurities	<1%

To obtain more information on the hazards of the substances, consult sections 11, 12 and 16.

Mixtures

See composition table above.

4. FIRST AID MEASURES

Description of necessary first-aid measures

Request medical assistance immediately, showing the SDS of this product.

By inhalation

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

By skin contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poison Information Centre or a doctor.

By eye contact

If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poison Information Centre, a doctor, or for at least 15 minutes.

By ingestion/aspiration

For advice, contact a Poison Information Centre or a doctor at once. If swallowed, do not induce vomiting.

First aid facilities: Eye wash facilities and safety shower should be available.

Most important symptoms/effects, acute and delayed

Irritating to the eyes, skin and respiratory system, with possible burns.

Indication of immediate medical attention and special treatment needed, if necessary

Treat as for moderate to strong alkali and symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Suitable: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable: None known.

Specific hazards arising from the chemical

Non-flammable. May evolve toxic gases (calcium oxides) if strongly heated. No fire or explosion hazard exists.

Special protective actions for fire-fighters

None specifically allocated; use standard fire-fighting precautions and protective equipment.

Additional provisions

Hazchem code: None allocated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in Section 8. Clear the area of all unprotected personnel. Contact emergency services where appropriate.

Environmental precautions

Prevent product from entering drains and waterways.

Methods and materials for containment and cleaning up

Contain spillage, then collect and place in suitable containers for reuse or disposal. Avoid generating dust.

Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Before use, carefully read the product label. Use safe work practices to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area, removed from incompatible substances and foodstuffs. Ensure packages are adequately labelled, protected from physical damage and sealed when not in use.

Specific end use(s)

No information provided beyond the uses already specified in Section 1.2.

Need a price or stock? Request a quote at www.surajchemicals.com/request-quote | WhatsApp +91 70927 22822

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Ingredient	TWA	STEL
Aluminium oxide	10 mg/m³	–
Calcium carbonate (Limestone, Marble, Whiting)	10 mg/m³	–
Calcium hydroxide	5 mg/m³	–
Calcium oxide	2 mg/m³	–
Iron oxide fume (Fe_2O_3) (as Fe)	5 mg/m³	–
Magnesium oxide (fume)	10 mg/m³	–
Quartz (respirable dust)	0.1 mg/m³	–

No biological limit values have been established for this product.

Appropriate engineering controls

Avoid inhalation. Use in well-ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

B. Respiratory protection

Where an inhalation risk exists, wear a Class P1 (Particulate) respirator. At high dust levels, wear a Powered Air Purifying Respirator (PAPR) with Class P3 filter or a Class P3 respirator.

C. Specific protection for the hands

Wear PVC or rubber gloves when handling material to prevent skin contact.

D. Eye and face protection

Wear safety glasses or dust-proof goggles when handling material to avoid contact with eyes.

E. Bodily protection

Wear long-sleeved shirt and full-length trousers.

F. Additional emergency measures

Eye wash facilities and safety shower should be available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	
Physical state at 20°C	Solid (fine powder)
Appearance	Fine white powder
Odor	Odourless
Odour threshold	Not available
Volatility	
Boiling point	580°C
Melting point	580°C
Evaporation rate	Not available
Vapour pressure	Not available
Product Description	
pH	13
Vapour density	Not available
Specific gravity	2.1 – 2.3
Solubility (water)	1.6 g/L
Partition coefficient	Not available
Decomposition temperature	580°C
Viscosity	Not available
Flammability	
Flammability	Non flammable
Flash point	Not relevant
Upper / Lower explosion limit	Not relevant
Autoignition temperature	Not available

Other information

Bulk density	450 – 500 kg/m³
Explosive properties	Not available
Oxidising properties	Not available

10. STABILITY AND REACTIVITY

Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

Chemical stability

Stable under recommended conditions of storage.

Possibility of hazardous reactions

Polymerization will not occur.

Conditions to avoid

Shock/Friction	Contact with Air	Increase in Temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Avoid contact with incompatible substances

Incompatible materials

Incompatible (violently) with acids (e.g. nitric acid), maleic anhydride, nitroethane, nitromethane, nitroparaffins, nitropropane and phosphorus. Calcium hydroxide, or hydrated lime, is already neutralised and is not expected to undergo oxidation.

Hazardous decomposition products

May evolve calcium oxides when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

A. Ingestion (acute effect)
No known toxicity data is available for this product. Based on available data, the acute toxicity classification criteria are not met.

B. Inhalation (acute effect)
Irritating to the respiratory system. Over exposure to dust may result in severe mucous membrane irritation of nose and throat, coughing and bronchitis.

C. Contact with skin and eyes (acute effect)
Irritating to the skin. Contact may result in irritation, redness, pain, rash, dermatitis and possible skin burns. Irritating to the eyes; contact may result in irritation, lacrimation, pain, redness, corneal burns and possible permanent damage.

D. CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)
Crystalline silica is classified as carcinogenic to humans (IARC Group 1); however, there is insufficient respirable silica in this product (<3% quartz) to be classified as a carcinogen. Insufficient data to classify as a mutagen. Insufficient data to classify as a reproductive toxin.

E. Sensitizing effects
This product is not known to be a skin or respiratory sensitiser.

F. Specific target organ toxicity (STOT) – single exposure
Irritating to the respiratory system.

G. Specific target organ toxicity (STOT) – repeated exposure
Chronic exposure to respirable silica may result in pulmonary fibrosis (silicosis); however, given the low levels present, overexposure is not anticipated.

H. Aspiration hazard
This product does not present an aspiration hazard.

12. ECOLOGICAL INFORMATION

Toxicity	The aquatic toxicity of calcium hydroxide is due to its alkalinity.
Persistence and degradability	Neutralised to calcium carbonate by absorption of atmospheric carbon dioxide and is not degraded by oxidation.
Bioaccumulative potential	Calcium hydroxide does not bioaccumulate in the environment.
Mobility in soil	Not available, but considered low.
Results of PBT and vPvB assessment	No information provided.
Other adverse effects	No information provided.

13. DISPOSAL CONSIDERATIONS

Disposal methods	Neutralise with dilute acid (e.g. 3 mol/L hydrochloric acid) or similar. For small amounts, absorb with sand or similar and dispose of to an approved landfill site. Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA.

Transport of dangerous goods by land (ADR/RID)

14.1 UN number	None Allocated
14.2 UN proper shipping name	None Allocated
14.3 Transport hazard class(es)	None Allocated
14.4 Packing group	None Allocated
14.5 Environmental hazard	No information provided
14.6 Special precautions for user	Not classified as a dangerous good
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by sea (IMDG)

14.1 UN number	None Allocated
14.2 UN proper shipping name	None Allocated
14.3 Transport hazard class(es)	None Allocated
14.4 Packing group	None Allocated
14.5 Marine pollutant	No information provided
14.6 Special precautions for user	Not classified as a dangerous good
14.7 Transport in bulk	Not relevant

Transport of dangerous goods by air (IATA/ICAO)

14.1 UN number	None Allocated
14.2 UN proper shipping name	None Allocated
14.3 Transport hazard class(es)	None Allocated
14.4 Packing group	None Allocated
14.5 Environmental hazard	No information provided
14.6 Special precautions for user	Not classified as a dangerous good
14.7 Transport in bulk	Not relevant

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

A poison schedule number has not been allocated to this product. It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of local circumstances, in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation

Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)

16. OTHER INFORMATION

Legislation related to safety data sheets

This safety data sheet has been designed in accordance with Annex 4 – Guidance on the preparation of Safety Data Sheets of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Texts of the legislative phrases mentioned in sections 2 and 3

H315: Causes skin irritation.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

Advice related to training

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources

Original manufacturer's Safety Data Sheet (Boral Cement, prepared by Risk Management Technologies); Safe Work Australia GHS-based classification criteria.

Abbreviations and acronyms

ADR: European agreement concerning the international carriage of dangerous goods by road | IMDG: International maritime dangerous goods code | IATA: International Air Transport Association | ICAO: International Civil Aviation Organisation | IARC: International Agency for Research on Cancer | TWA: Time Weighted Average | STEL: Short-Term Exposure Limit | STOT: Specific Target Organ Toxicity

Disclaimer: The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within Suraj Chemicals' awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

(This document is computer generated and therefore does not require any signature.)