

ORIENT PAPER MILLS - CAUSTIC SODA UNIT, AMLAI, ANUPPUR (M.P.)

MATERIAL SAFETY DATA SHEET

Stable Bleaching Powder (Calcium Hypochlorite)

1. IDENTIFICATION:

Trade Marks and Synonyms: Stable Bleaching Powder, Calcium Oxychloride, Calcium Hypochlorite

Chemical Names and Synonyms: Calcium Hypochlorite

Physical Form: White Powder having characteristic chlorine odour

Molecular Formula : Ca (OCI)₂

Manufacturer Name & Address: Orient Paper Mills- Caustic Soda Unit, Amlai (MP)

Telephone: 91-7652-286266 : e-mail: csu@opil.in

Responsible Person: Safety Officer

2. INFORMATION OF MAJOR INGREDIENTS:

Chemical name: Calcium Hypo chlorite

CAS No: 7778-54-3

Formula: Ca (OCI)₂

3. HAZARD IDENTIFICATION:

Main Risk: Contact with combustible material may cause fire

Contact with skin: Causes irritation, on contact for small duration



Contact with eyes: Causes irritation

Safety Phrases: Keep out of reach of children. In case of contact with skin, wash Immediately with plenty of water

4. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance and Odour: Powder, White solid with odour of

pH chlorine 11.5 (5% solution)

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Chlorine Content: Min. 35% m/m
 Bulk Density: 0.8 – 1.2 gm/cc at 20 °C
 Boiling Point: Not applicable
 Melting Point: Decomposes at temperature above 100 °C
 Flash Point: Not applicable
 Auto Ignition: Not applicable
 Flammable Limit: Not Applicable
 Vapour Pressure (mm Hg): Not Applicable
 Solubility in Water: 23.4 gm/100 ml water at 40 °C
 Solubility in Organic Solvents: Not Known

Oxidizing /Explosive Properties: Strong Oxidizer, so it has serious fire and explosion risks

5. STABILITY AND REACTIVITY:

Stability: Normally stable (losses available chlorine by 2% on heating above 100 °C)

Conditions to avoid: Excessive heat and moisture.

Material to avoid: Acids, organic compounds, metal oxides, ammonia, urea & amines etc.

Reactivity:

Air: Releases chlorine gas.

Water: A risk of explosion or toxic gas formation

Acids: Highly reactive with a risk of explosion & toxic gas formation

Alkalis: Reactive.



Hazardous Decomposition Products: Nascent Oxygen, Chlorine, Calcium chlorate

6. TOXICITY DATA:

Routes of Entry:

In contact with skin: Solution can cause chemical burns

In contact with eyes: Dust can cause eye irritation

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Inhalation:	Dust may irritate nose, throat & upper respiratory tract
Toxicity Data:	LD50 (Rats, Oral) 805 mg/kg LD50 (Rabbit, Dermal) >2000 mg/kg
Chronic Toxicity:	Not Available
Carcinogenic Toxicity:	No data available
Mutagenic Toxicity:	Studies for mutagenicity were negative
Reproductive Toxicity:	No information is available
Respiratory Protection:	Anti dust mask & respirator with acid cartridge for chlorine
Eye Protection:	Goggles or full-face mask

7. FIRST AID MEASURES:

Skin Contact:	Remove contaminated clothing and wash affected area with sufficient quantity of water for 15-20 minutes & obtain medical advice immediately
Eye Contact:	Immediately flush eyes thoroughly for at least 15 minutes with running water. Hold eyelids open during flushing. If irritation persists, repeat flushing. Seek medical attention.
Inhalation:	Move the victim to fresh air, obtain medical attention .In case of respiratory failure provide artificial respiration
Ingestion:	Have victim rinse mouth thoroughly with water & drink plenty of water to dilute the material in stomach. If spontaneous vomiting occurs, make victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. Obtain medical attention immediately.
Further Medical Advice:	Seek medical attention



8. FIRE AND EXPLOSION HAZARD DATA:

Fire Extinguishing Media: Water, Heating will emit fumes. Water spray, foam, carbon dioxide or dry powder may be used. Keep containers cool with copious amounts of water.

Would any material saturated with this Product be subject spontaneous Combustion? Yes

Fire Fighting Protective Equipment: Were full protective clothing, goggles & mask suitable for chlorine gas.

Unusual fire and explosive hazards: During a fire in which this material is involved, emits toxic fumes of HCl.

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9. PERSONAL PROTECTION:

General Precautions

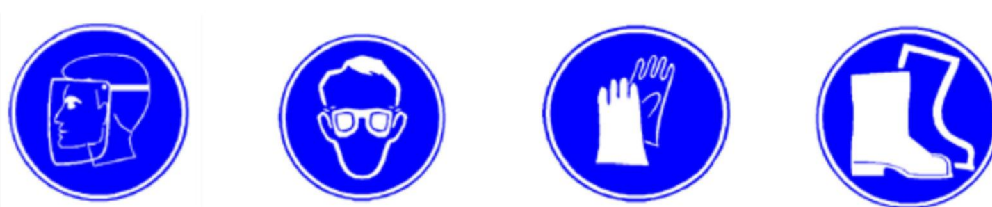
Eye and skin protection should be used when handling SBP Use dust mask during handling SBP

Appropriate engineering controls:

Local exhaust ventilation should be applied wherever there is an incidence of point source emissions or dispersion of regulated contaminants in the work area. Ventilation control of the contaminant as close to its point of generation is both the most economical and safest method to minimize personnel exposure to airborne contaminants. The most effective measures are the total enclosure of processes and the mechanization of handling procedures to prevent all personal contact.

Ventilation: Ensure compliance with applicable exposure limits.

Personal Protective Equipment:



10. HANDLING AND STORAGE:

Handling: Store in a well ventilated area. Keep containers closed. Keep away from heat, sparks and flames. Use only with adequate ventilation. Avoid generating dust & breathing vapour. Avoid contact with eyes, skin or clothing.

Storage: Store in tightly closed containers in a cool, dry & well-ventilated place. Keep away from sunlight and combustible materials. Always keep the bag on wooden pallets.

11. SPILLAGE / ACCIDENTAL RELEASE:

Spillage: Do not touch spilled material. Prevent it entering sewers. Dry manual lifting of the spilled material is suggested.

Personal Precautions: Avoid generation of dust. Avoid Eyes & Skin Contact. Avoid Inhalation. Avoid Ingestion. Wear appropriate personal protective equipments.

Environmental Precautions: Prevent contamination of soil and water. Prevent from spreading or entering into sewers or confined spaces.

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12. WASTE DISPOSAL:

Waste Disposal: Untreated SBP waste must never be discharged directly in to sewers. Review National/Regional Regulations. Packing materials gets contaminated & can be disposed off by appropriate methods in accordance with National / Regional requirement.

13. ENVIRONMENTAL INFORMATION:

Bio – Accumulation Not determined

Biodegradability This material is inorganic and doesnot subject to Biodegradation

Toxicity Non-toxic

Mobility No

Behavior in Sewage Improves sewage quality

14. REGULATORY INFORMATION:

Danger Symbol

O Oxidizing

C Corrosive

N Dangerous for the environment

Risk Phrases

R40/R20/R22: Harmful: possible risk of irreversible effects if swallowed.

R36: Irritating to eyes

R8: Contact with combustible material may cause fire.

R50/53: Very toxic to aquatic organisms, may cause long term adverse effects

R31: Contact with acid liberates toxic gas

R34: Causes burns

Safety Phrases

S2: Keep out of the reach of children.



S24/25: Avoid contact with skin and eyes.

S23: Do not breathe gas/fumes/vapour/spray.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately and show the label where possible

S61: Avoid release to the environment

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15. TRANSPORT INFORMATION:

BIS No. CM/L : 8200115503

Stable bleaching powder is packed in 25 kg HDPE bags with double liner and 50Kg HDPE drum with liner and transported only through trucks.

Labelling

Every vehicle used for transporting stable bleaching powder shall be legibly and conspicuously marked with an emergency information panel as per the requirement of Central Motor Vehicles Act, 1989.



Safety during Transportation

1. Do not smoke in the SBP loaded truck.
2. All sources of ignition must be kept away from the truck during transportation,
3. Driver should follow specified route only, maintain speed limit, never park the truck near residential areas, drive truck carefully and observe all routes and signals. Avoid overtaking of moving vehicles and do not leave truck without watch at any time.
4. SBP should be kept away from heat and moisture.
5. No inflammable material like oil, paint, varnish, grease, etc, should be clubbed with SBP, which may react with SBP and catch fire.
6. Loaded SBP should be well covered with tarpaulin,
7. No part of SBP bag or drum should come outside from the base of the truck, which can rub with the tyre/any moving part and catch fire.
8. Do not use hooks for loading or unloading.
9. In case of emergency (for example, fire, accidents, etc) follow the instructions mentioned in the instruction manual to control and mitigate an emergency:
 Stop the engine; Notify police and fire brigade immediately; Mark roads; warn other road users; Keep public away;
 In case of fire, move the truck immediately to an open area and flush with excess water; and immediately contact manufacturer/supplier.

16. OTHER INFORMATION:

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release, and neither it is to be considered a warranty or quality specification, nor as a binding statement on contractually agreed product qualities. C.K. Birla group does not take any guarantee or legal liability expressed or implied under any circumstances in respect of the adequacy of this document for any particular purpose.

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