

## MATERIAL SAFETY DATA SHEET

# Stable Bleaching Powder Calcium Hypochlorite

#### 1. IDENTIFICATION

Trade Marks and Synonyms Stable Bleaching Powder, Calcium Oxychloride, Calcium hypo

chlorite

Chemical Names and Synonyms Calcium Hypochlorite

Physical Form White Powder having characteristic chlorine odour

Molecular Formula Ca (OCl)<sub>2</sub>

Manufacturer Name & Address Aditya Birla Chemicals (India) Ltd,

Dist. Sonebhadra, Renukoot

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Responsible Person Safety Officer;

Aditya Birla Chemicals (India) Ltd, Renukoot

Dist Sonebhadra (UP) 231217, INDIA

### 2. INFORMATION OF MAJOR INGREDIENTS

Chemical Name Calcium Hypo chlorite

CAS No 7778-54-3

Formula Ca (OCl)<sub>2</sub>

#### 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 chlorine

pH 11.5 (5% solution)

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 unstable (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

Inhalation Dust may irritate nose, throat & upper respiratory tract

Ingestion May cause burns to the mouth & digestive tract

Toxicity Data LD<sub>50</sub> (Rats, Oral) 805 mg/kg

LD<sub>50</sub> (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.

Ventilation Requirements Adequate ventilation required

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 to spontaneous combustion?

Yes

Fire Fighting Protective Equipment Wear 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.

9. PERSONAL PROTECTION

General Precautions Eye and skin protection should be used when

10. HANDLING AND STORAGE Handling SBP

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.

## 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 does not subject to biodegradation.

Toxicity Non-toxic

Mobility No

Behaviour 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

## 15. TRANSPORT INFORMATION

UN No. & Symbols 2208, "Oxidizing Substance"

EC No: 231-908-7

Road /Rail Transport Not Known Air Transport Not Known

## 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.

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