

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND COMPANY

- 1.1. Product Name : Stable Bleaching Powder
(Calcium Hypochlorite)
- 1.2. Chemical Formula : $\text{Ca}(\text{OCl})_2$
- 1.3. Use : Disinfections, Sanitation, Bleaching
Oxidation, etc.
- 1.4. Manufacturer : Aditya Birla Chemicals (India) Limited
REHLA, JHARKHAND
- TEL. No. 06584-262211 / 262221
FAX NO. 06584-262205
E-Mail: abcil@adityabirla.com
- 1.5. Supplier :

2. COMPOSITION & IDENTIFICATION INGREDIENTS

- 2.1. Chemical Identity : Calcium Hypo Chlorite
- 2.2. Ingredients : Calcium Hypo Chlorite
35% Available Chlorine

3. HAZARD IDENTIFICATION

- 3.1. Oxidizing Substance, Class - 5.1

4. FIRST – AID MEASURES

- 4.1. Skin and Eye Contact : Promptly wash the affected area with plenty of water and obtain medical attention immediately.
- 4.2. Inhalation : Move the victim to fresh Air, obtain medical attention. In case of respiratory failure provide artificial respiration.
- 4.3. Ingestion : Have victim rinse mouth thoroughly with water & drink plenty of water to dilute material in the stomach. But never give anything by mouth if victim is unconscious. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

- 5.1. Extinguishing Media : Water
- 5.2. Unsuitable Extinguishing Media : Not Known
- 5.3. Special Exposure Hazards : Chlorine Gas
- 5.4. Special Protective Equipment : Self contained Breathing Apparatus
- 5.5. Combustion Products : Non Combustible but decomposes due to heat

6. ACCIDENTAL RELEASE MEASURES

- 6.1. Personal Precautions : Avoid Eye & Skin contact. Avoid inhalation. Use appropriate personal protective equipments.
- 6.2. Environmental Precautions : Prevent material entering to sewers or confined spaces.
- 6.3. Clean up procedure : Do not touch spilled material. Prevent it entering sewers. Dry manual lifting of spilled material is suggested.

7. HANDLING AND STORAGE

- 7.1. Handling Precautions : Avoid generating dust. Avoid skin & eye contact. General ventilation is required.
- 7.2. Storage : Store tightly closed containers in cool, dry & well-ventilated place. Keep away from sunlight. Keep away from combustible materials.

7. HANDLING AND STORAGE

7.3. Incompatible Materials	: Acids, organic compounds, Metal oxides, Ammonia, urea & amines etc.
7.4. Other Information	: The storage area should have a non-combustible & corrosion resistant floor.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1. Exposure Controls	: Adequate ventilation, Process or Personnel enclosures, P.P.E. etc. Avoid dust generation.
8.2. Personal Protective Equipment	:
8.2.1. Respiratory Protection	: Anti Dust mask & Respirator with an acid gas cartridge for chlorine.
8.2.2. Eye Protection	: Chemical Safety Goggles & face shield
8.2.3. Skin Contact	: Impervious rubber hand gloves, coveralls, boots etc.
8.2.4. Hygiene Measures	: Wash hands with soap & water thoroughly after handling, especially before eating. Also change contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Appearance	
9.1.1. Form	: Powder
9.1.2. Colour	: White
9.1.3. Odour	: Chlorine Odour
9.2. Safety Data	
9.2.1. pH	: 11.5 (5% Solution)
9.2.2. Boiling Point	: Not Applicable
9.2.3. Melting Point	: Decomposes at temperatures above 100 degree C
9.2.4. Flash Point (Closed Cup)	: Not Applicable
9.2.5. Flammability (Solid, Gas)	: Not Combustible
9.2.6. Auto flammability	: Not Applicable
9.2.7. Explosive Properties	: Strong Oxidising Agent, so it has serious fire and explosion risk
9.2.8. Oxidising Properties	: Strong Oxidiser
9.2.9. Vapour Pressure	: Not Applicable
9.2.10. Bulk Density	: 0.9 – 1.1 gm/cc

9. PHYSICAL AND CHEMICAL PROPERTIES

9.2.11. Solubility

In water : 23.4 gms/100 ml. Water at 40 degree C
In solvents : Not Known

9.2.12. Partition coefficient (Water) : Not Known

9.3. Other Data

9.3.1. Vapour Density : NotApplicable

9.3.2. Evaporation Rate : NotApplicable

9.3.3. Conductivity : Not Known

9.3.4. Viscosity : NotApplicable

9.3.5. Volatiles : Non Known

10. STABILITY AND REACTIVITY

10.1. Stability : Normally unstable (loses available chlorine by 2% on heating at 100 degree C).

10.2. Reactivity : Reactive

10.3. Conditions to avoid : Excessive Heat

10.4. Materials to avoid : Incompatible Materials (See 7.3)

10.5. Hazardous decomposition (Products) : Nascent Oxygen, Chlorine, Calcium Chlorate

11. TOXICOLOGICAL INFORMATION

11.1. Health Effects

11.1.1. Skin & Eye : Dust can cause eye irritation. Solution can cause chemical burns.

11.1.2. Inhalation : Dust may irritate nose, throat & upper respiratory tract.

11.1.3. Ingestion : May cause burns to the mouth & digestive tract.

11.2. Other effects : Skin irritation may occur from repeated or prolonged skin contact.

11.3. LD₅₀ Oral (Rat) : 805 mg/Kg.

12. ECOLOGICAL INFORMATION

12.1. Mobility : No

12. ECOLOGICAL INFORMATION

12.2. Persistence and Degradability	: Degradable
12.3. Bioaccumulative Potential	: Not determined
12.4. Ecotoxicity	: Non-Toxic
12.5. Behaviour in Sewage	: Improves sewage quality.

13. DISPOSAL CONSIDERATIONS

13.1. Product Disposal	: Untreated SBP waste must never be discharged directly in to sewers. Review National / Regional regulations
13.2. Packaging Disposal	: Packing material does not get contaminated & can be disposed off by usual methods in accordance with National or Regional requirement.

14. TRANSPORT INFORMATION

14.1. UN No. & Symbols	: 2208, "Oxidizing Substance".
14.2. Road and Rail Transport (ADR/RID)	: Not Known
14.3. GGVE / GGVS	: Not Known
14.4. IMDG Code	: Not Known
14.5. Air Transport (ICAO/IATA)	: Not Known
14.6. P Phrases	: Not Known
14.7. S Phrases	: Not Known

15. REGULATORY INFORMATION

15.1. Health and Safety Information on Labels	: Oxidising Material Class – 5.1
15.2. RTECS	: Not Known

16. OTHER INFORMATION

The information & data contained in the "Material Safety Data Sheet" is drawn from following sources:

- CIS (No. C40) of Indian Chemical Manufacturers Association
- CHEMINFO of Canadian Centre of Occupational Health & Safety.
- Our own experience.

