MATERIAL SAFETY DATA SHEET (MSDS) - SODIUM BICARBONATE

1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Product: SODIUM BICARBONATE
Chemical Name: Sodium Bicarbonate.
Alternative Name: Bicarbonate of Soda, Baking Soda, Soda Bicarb, Sodium Hydrogen Carbonate.
Chemical Formula: NaHCO3

COMPANY IDENTIFICATION
Supplier: Pon Pure Chemicals Group
CHENNAI, TAMILNADU, INDIA
24 Hour Health Emergency
(91) 8939878447
(91) 9444038694
Transportation Emergency Phone
(91) 8939768680

Company Name | Place | EMERGENCY TELEPHONE NUMBER
--- | --- | ---
Pon Pure Chemicals Group | India | Day Emergency – 044-26161803-26161809

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>EC Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Bicarbonate</td>
<td>144 - 55 - 8</td>
<td>205 - 633 8</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

A substance of low toxicity widely used in food and medicine. Treat as low toxicity dust. No significant health or environmental hazards associated with the material.

4. FIRST AND MEASURES

Inhalation
- Remove to fresh air

Skin Contact
- Wash skin with plenty of water
- If irritation occurs and persists seek medical advice

Eye Contact
- Irrigate eye thoroughly with eye wash solution or clean water for at least 10 minutes.
- Eyelids should be held away from the eyeball to ensure through rinsing.
- Obtain medical attention if necessary.

Ingestion
- DO NOT induce vomiting
- Wash out mouth with water and give plenty of water to drink (at least 300 ml).
- Obtain medical attention if necessary.

5. FIRE-FIGHTING MEASURES

Flash Point - Non-combustible
Extinguishing Media - All extinguishing products are allowed
Special Hazards - Non-combustible
Hazardous Decomposition Products (under fire conditions) - Not applicable

6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions - Prevent discharges into the environment (rivers, water courses, sewers etc.)

Methods for clean up - Clear up spillages by suitable means, avoiding dust formation
- Collect as much as possible in a suitable clean container, preferably for re-use, otherwise for disposal.
- Wash the spillage area with large quantities of water.

7. HANDLING AND STORAGE

Handling - Atmospheric levels should be controlled in compliance with the occupational exposure limit. Skin protection should be worn for regular and continuous use.
Storage - Store in a cool dry place (in humid conditions the product will absorb moisture from the atmosphere and this will eventually cause caking and loss of free flowing properties). Do not store adjacent to acids.

Fire and Explosion Prevention - Non-combustible

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
- Provide adequate ventilation
- In the case of insufficient ventilation, wear suitable respiratory equipment

Occupational Exposure Standards
- Not listed by H&SE
- Nuisance Dust
  
  Recommended Limits: OES 10mg/m3 (total dust) (8hr TWA)
  5mg/m3 (respirable dust) 8hr TWA.

Respiratory Protection
- In the case of high dust levels wear suitable respiratory protective equipment, ie. Dust masks or respirator.

Hand Protection
- Wear suitable chemical resistant protective gloves for frequent or prolonged operations.

Eye Protection
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Crystalline Powder</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Decomposes</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto Ignition Temp.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>None known</td>
</tr>
<tr>
<td>Oxidising Properties</td>
<td>None known</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>None known</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>2.22</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>980 kg/m3</td>
</tr>
<tr>
<td>pH value</td>
<td>9.5% w/w @ 25 °C</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not applicable</td>
</tr>
<tr>
<td>(n-octanol/water)</td>
<td>8.3 (1% w/w solution)</td>
</tr>
<tr>
<td>Relative vapour density (air-1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability - Stable under recommended storage and handling conditions (see Section 7).

Conditions to avoid - Contact with acids unless under controlled conditions
- Heating the product above 60 deg cel.  4220 mg/kg.
- Humidity and moisture can cause caking of product. Dust may cause discomfort

Materials to avoid - Acids

Hazardous decomposition products - Not applicable

11. TOXICOLOGICAL INFORMATION

Acute Toxicity - Oral LD 50, rat
- Inhalation

Eye Irritation - Dust may cause discomfort
11. ACUTE ECOLOGICAL INFORMATION
- Fish, Lepomis macrochirus
- Daphnia sp.

12. BIO – DEGRADABILITY
- Aerobic / Anaerobic degradation

13. LONG TERM EXPOSURE
- No known effect
- Not applicable (inorganic compound)

14. DISPOSAL CONSIDERATIONS
- Must be disposed in accordance with local, state or national regulations
- Do not dispose of directly with acids - Not restricted
- Dissolve in water and neutralize with an acid - Not restricted

15. AIR TRANSPORT INFORMATION
- Not regulated - Not classified as hazardous for transport.

* Land Transport
  - ADS Class: Not relevant
  - RID Class: No
  - TREM – Card: Not relevant
  - Hazard Identification number: Not regulated
  - Proper shipping name: None

* Sea Transport
  - IMO / IMGD
  - Packing group
  - EMS
  - Marine Pollutant
  - Proper shipping name

* Air Transport
  - ICAO/IATA-DGR Class
  - Proper shipping name
16. Other Information

Disclaimer:
The information and recommendations contained herein are, to the best of Pon Pure Chemicals Group knowledge and belief, accurate and reliable as of the date issued. You can contact Pon Pure Chemicals Group to ensure that this document is the most current available from Pon Pure Chemicals Group. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.