



Sodium Bicarbonate Commercial

CHEMICAL NAME / FORMULA :
Sodium Bicarbonate - NaHCO_3

FORMATION :
Crystallised Solid

PROPERTIES:

Appearance : White Powder	Specific Gravity (0° C) : 2.159 (water = 1)
Odour : Odourless	Boiling Pt / Range : Not available
Flammability : Non Flammable	Flash Point : Non Flammable
Explosive : Not available	Corrosive : Non Corrosive in Presence of Glass
Chemical Stability : Stable	Incompatibility : Yes

INSTALLED CAPACITY

21000 MTS per annum

INPUT

Salt and lime stone

OUTPUT

Sodium Bicarbonate

SPECIFICATIONS:

Total Alkalinity (as Na_2CO_3) percent by mass, min	99.00
Chloride (as Cl) percent by mass, max	0.030
Matter Insoluble in water percent by mass, max	0.030
Iron (as Fe_2O_3) percent by mass, max	0.0030
Sulphate (as Na_2SO_4) percent by mass, max	0.001
Heavy metals (as Pb) parts per million	<5.0
Arsenic (as As) parts per million	<1.5
Copper as (Cu) parts per million	<30
pH (1% solution)	8.6



PACKAGING AND HANDLING

Sodium Bicarbonate is packed in 50kg HDPE bags. Avoid handling causing generation of dust. Wear full protective clothing for prolonged exposure and/or high concentrations. Provide good ventilation at work place. Keep away from incompatibles such as acids.



TRANSPORTATION CLASSIFICATION

CAS No: 144-55-8



MATERIAL SAFETY DATA

Given Overleaf



USAGES

Sodium Bicarbonate is mainly used for cooking (Baking), Neutralization of Acids and bases, Medical uses, personal hygiene products.



MATERIAL SAFETY DATA

EXPOSURE LIMIT AND STAFF PROTECTION EQUIPMENT

Exposure Limit not available.

Splash goggles, full suit, dust respirator, boots, gloves. A self breathing apparatus should be used to avoid inhalation of the product.

PHYSICAL & CHEMICAL PROPERTIES

Appearance / Physical state : Solid.

Odor : Odorless

Taste: Saline Alkaline

Molecular Weight: 84.01 g/mole

Colour: White

Solubility : Soluble in cold water, Slightly soluble in alcohol.

Melting Point : 851°C (1563.8°F)

Vapour Density (air=1) : N/A

Vapour Pressure : N/A

pH Value, 1% Solution : 8.4 Concentration (%M): 1%.

Stability : Normally Stable.

STABILITY AND REACTIVITY

Stability : The product is stable.

Instability Temperature: Not available.

Condition of Instability: Incompatible materials, Moisture. Stable in dry air, but slowly decomposes in moist air. Incompatibility with various substances: Reactive with acids.

Corrosivity : Non-Corrosive in presence of glass.

Special Remarks on Reactivity : Reacts with acids to form carbon dioxide. Dangerous reaction with monoammonium phosphate or a sodium-potassium alloy

Special Remarks on Corrosivity : Not available.

Polymerization : Will not occur.

INFORMATION OF TOXICOLOGY

Routes of Entry : Inhalation, Ingestion.

Toxicity to Animals : Acute oral toxicity (LD 50): 3360 mg/kg. (Mouse).

Chronic Effects on Human : Not available.

Other Toxic Effect on Humans : Slightly Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Humans : Sodium Bicarbonate as produced genetic effects in rats (unscheduled DNA synthesis). However, no effects have been found in humans

Special Remarks on other Toxic Effects on Humans : Acute Potential Health Effects:

Skin : May Cause mild skin irritation.

Eyes : May cause mild eye irritation.

Inhalation : May cause respiratory tract irritation. Symptoms may include coughing and sneezing.



MATERIAL SAFETY DATA

NAME OF THE PRODUCT	Soda Bi-Carb
COMPOSITION / COMPONENTS	---
HAZARDS IDENTIFICATION	<p>Potential Acute Health Effect : Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.</p> <p>Potential Chronic Health Effects:</p> <p>CARCINOGENIC EFFECTS : Not available</p> <p>MUTAGENIC EFFECTS : Not available</p> <p>TERATOGENIC EFFECTS : Not available</p> <p>DEVELOPMENT TOXICITY: Not available</p> <p>Repeated or prolonged exposure is not known to aggravate medical condition.</p>
FIRST AID MEASURES	<p>Inhalation : Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention.</p> <p>Ingestion : Drink a couple of glasses water or milk. Do not give victim anything to drink if he is unconscious. Get medical attention.</p> <p>Skin : Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if any discomfort continues.</p> <p>Eyes : Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.</p>
MEASURES IN CASE OF UNINTENTIONAL RELEASE	<p>Small Spill : Use appropriate tools to put the spilled in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to regional authority requirement.</p> <p>Large spill : Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.</p>
MEASURES FOR FIRE FIGHTING	Non Flammable.
HANDLING AND STORAGE	<p>Precautions : Do not ingest. Do not breath dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.</p> <p>Storage : Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area.</p>



MATERIAL SAFETY DATA

INFORMATION OF TOXICOLOGY

Ingestion : Symptoms of overexposure to Sodium Bicarbonate include thirst, abdominal pain, gastroenteritis, and inflammation of the digestive tract.

Chronic Potential Health Effects :

Skin: Repeated or prolonged skin contact may cause irritation, drying or cracking of the skin.

Ingestion and Inhalation : Chronic toxicity usually occurs within 4 to 10 days following ingestion of very large amounts. Repeated or prolonged ingestion or inhalation of large amounts may cause metabolic abnormalities, and sodium retention. Metabolic abnormalities such as acidosis, hypernatremia, hypochloremia, aldolosis, hypocalcemia, or sodium retention may affect the blood, kidneys, respiration (cyanosis, apnea secondary to metabolic acidosis or pulmonary edema), and cardiovascular system (tachycardia, hypotension). Severe toxicity may also affect behavior/central nervous system / nervous system. Neurological changes may result from metabolic abnormalities. These may include fatigue, irritability, dizziness, mental confusion, paresthesia, seizures, tetany, cerebral edema.

Medical Conditions Aggravated by Exposure: Person with pre-existing skin conditions might have increased sensitivity. Predisposing conditions that contribute to a mild alkali syndrome include, renal disease, dehydration, and electrolyte imbalance, hypertension, sarcoidosis, congestive heart failure, edema, or other sodium retaining conditions.

INFORMATION ABOUT WASTE DISPOSAL

Waste disposal : Waste must be disposed of in accordance with state environment control regulations.

INFORMATION ABOUT TRANSPORT

Transportable in HDPE bags mounted on road truck.

STATUTORY REGULATORY INFORMATION

OTHER INFORMATION

CAS NO.: 144-55-8

