



# Material Safety Data Sheet

<b>Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER</b>	
<b>Product name:</b>	<b>Sodium bicarbonate</b>
<b>Other Names:</b>	<b>Baking Soda; Bicarbonate of soda; Sodium acid carbonate; Monosodium carbonate; Sodium hydrogen carbonate; Carbonic acid monosodium salt</b>
<b>Chemical formula:</b>	<b>NaHCO<sub>3</sub></b>
<b>Recommended Use:</b>	<b>Used as an antacid to treat heartburn, indigestion, and upset stomach.</b>
<b>Company Identification:</b> <b>Address:</b>	<b>Kemcore International Limited 133 CONNAUGHT RD UNIT 703 ALLIANCE COMM BLDG, HONGKONG</b>
<b>Customer Centre:</b>	<b>Kemcore International Limited</b>
<b>Section 2: HAZARD IDENTIFICATION</b>	
<b>Emergency Overview:</b>	<b>Sodium Bicarbonate is an odorless solid, consisting of white granules or powder. Prolonged or repeated contact may cause irritation to the eyes, skin, and the respiratory system. When heated to decomposition it emits acrid smoke, fumes, and carbon dioxide. Firefighters should wear full protective equipment and clothing</b>
<b>Potential Acute Health Effects</b>	<b>Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.</b>
<b>Routes of entry:</b>	<b>Inhalation. Ingestion.</b>
<b>Target organs:</b>	<b>None.</b>
<b>Skin contact:</b>	<b>May cause skin irritation. Repeated or prolonged exposure may cause drying and cracking of the skin.</b>
<b>Eye contact:</b>	<b>Causes eye irritation. Causes redness and pain.</b>

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<b>Inhalation:</b>	May cause respiratory tract irritation.	
<b>Ingestion:</b>	May cause irritation of the digestive tract.	
<b>Chronic Exposure:</b>	<b>CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.</b>	
<b>Explanation of carcinogenicity:</b>	Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic. Only known sub-chronic effect is that of a marked systemic alkalosis. The material is not listed as a carcinogen or potential carcinogen by IARC, OSHA, ACGIH, NTP or NIOSH.	
<b>Medical conditions aggravated by exposure:</b>	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.	
<b>Section 3: Composition Information</b>		
<b>INGREDIENT</b>	<b>CAS No.</b>	<b>CONTENT</b>
		<b>% by Weight</b>
Sodium bicarbonate	144-55-8	100
<b>Section 4: FIRST AID MEASURES</b>		
<b>Inhalation:</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.	
<b>Ingestion:</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.	

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	<b>Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.</b>
<b>Skin:</b>	<b>Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.</b>
<b>Eye:</b>	<b>Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.</b>
<b>Advice to Doctor:</b>	<b>Large doses may produce systemic alkalosis and expansion in extra cellular fluid volume with oedema.</b>
<b>Section 5: FIREFIGHTING MEASURES</b>	
<b>Flash Point:</b>	<b>Not applicable.</b>
<b>Combustion Products:</b>	<b>Not available.</b>
<b>Extinguishing Media:</b>	<b>Not applicable.</b>
<b>Protective Equipment:</b>	<b>Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.</b>
<b>HAZCHEM Code:</b>	<b>2s</b>
<b>Section 6: ACCIDENTAL RELEASE MEASURES</b>	
<b>Spills and Disposal:</b>	<b>Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.</b>  <b>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.</b>



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<b>Protective Clothing:</b>	<b>Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.</b>
<b>Environmental:</b>	<b>Prevent further leakage or spillage if safe to do so.</b>
<b>Section 7: HANDLING AND STORAGE</b>	
<b>Handling:</b>	<b>Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as acids.</b>
<b>Storage:</b>	<b>Keep container tightly closed. Keep container in a cool, well-ventilated area.</b>
<b>Other Information:</b>	<b>Use general room dilution or local exhaust ventilation when excessive dust is expected in the work environment.</b>
<b>Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION</b>	
<b>Exposure Limits:</b>	<b>Not available.</b>
<b>Protective Equipment:</b>	<b>Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.</b>
<b>Engineering Controls:</b>	<b>Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.</b>
<b>Hygiene Precautions:</b>	<b>Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants</b>

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<b>Section 9. PHYSICAL AND CHEMICAL PROPERTIES</b>	
<b>Appearance:</b>	<b>Physical state and appearance: Solid.</b> <b>Color: White.</b>
<b>Odour:</b>	<b>Odorless.</b>
<b>Specific Gravity:</b>	<b>Density: 2.159 (Water = 1)</b>
<b>Bulk Density:</b>	<b>31-75 lbs./ft<sup>3</sup></b> <b>(500-1200 kg/m<sup>3</sup>)</b>
<b>pH:</b>	<b>Not available.</b>
<b>Solubility in Water:</b>	<b>Soluble in cold water. Slightly soluble in alcohol. Solubility in Water: 6.4, 7.6, 8.7, 10.0, 11.3, 12.7, 14.2, 16.5, 19.1 g/100 solution at 0, 10, 20, 30, 40, 50, 60, 80, and 100 deg. C, respectively. Solubility in Water: 6.9, 8.2, 9.6, 11.1, 12.7, 14.5, 16.5, 19.7, and 23.6 g/100g water at 0, 10, 20, 30, 40, 50, 60, 80, 100 deg. C, respectively.</b>
<b>Flash Point:</b>	<b>Non- flammable</b>
<b>Melting Point:</b>	<b>Not Available.</b>
<b>Other Information:</b>	
<b>Section 10: STABILITY AND REACTIVITY</b>	
<b>Stability:</b>	<b>The product is stable.</b>
<b>Hazardous Decomposition Products:</b>	<b>None.</b>
<b>Conditions to Avoid:</b>	<b>Incompatible materials, Moisture. Stable in dry air, but slowly decomposes in moist air.</b>
<b>Materials to Avoid:</b>	<b>Reacts with acids to form carbon dioxide. Dangerous reaction with monoammonium phosphate or a sodium-potassium alloy.</b>

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<b>Section 11: TOXICOLOGICAL INFORMATION</b>	
<b>ERMA Classification:</b>	Not available
<b>Ingestion:</b>	Symptoms of overexposure to Sodium Bicarbonate include thirst, abdominal pain, gastroenteritis, and inflammation of the digestive tract.
<b>Inhalation:</b>	May cause respiratory tract irritation. Symptoms may include coughing and sneezing.
<b>Skin:</b>	May cause mild skin irritation.
<b>Eye:</b>	May cause mild eye irritation.
<b>Chronic Effects:</b>	<p><b>Skin:</b> Repeated or prolonged skin contact may cause irritation, drying or cracking of the skin.</p> <p><b>Ingestion and Inhalation:</b> 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, hyponatremia, hypochloremia, alkalosis, 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, and cerebral edema.</p>
<b>Other Information:</b>	<p><b>Medical Conditions Aggravated by Exposure:</b> Persons 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.</p>



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<b>Section 12: ECOLOGICAL INFORMATION</b>	
<b>ERMA Classification:</b>	Not available
<b>Ecotoxicity:</b>	Not available.
<b>Section 13: DISPOSAL INFORMATION</b>	
<b>Product Disposal:</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Container Disposal:</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Section 14: TRANSPORT INFORMATION</b>	
<b>UN Number:</b>	None
<b>Proper Shipping Name:</b>	Sodium bicarbonate
<b>DG Class:</b>	None
<b>UN Packing Group:</b>	None
<b>Other Information:</b>	Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.
<b>Section 15: REGULATORY INFORMATION</b>	
<b>Federal and State Regulations: TSCA 8(b) inventory: Sodium bicarbonate</b>	
<b>Other Regulations: Not available.</b>	
<b>Other Classifications:</b>	



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**WHMIS (Canada): Not controlled under WHMIS (Canada).**

**DSCL (EEC):**

**This product is not classified according to the EU regulations. Not applicable.**

**HMIS (U.S.A.):**

**Health Hazard: 1**

**Fire Hazard: 0**

**Reactivity: 0**

**Personal Protection: E**

**National Fire Protection Association (U.S.A.):**

**Health: 1**

**Flammability: 0**

**Reactivity: 0**

**Specific hazard:**

**Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses**

**Section 16: OTHER INFORMATION**