

IDENTITY: Sodium Bicarbonate (Baking Soda)

Section I – Manufacturer Information

Church & Dwight Co., Inc.
469 North Harrison Street
Princeton, NJ 08543-5297

Telephone Number for Information
(609) 683-5900

Date Prepared: April 17, 1998

EMERGENCY NUMBER: (800) 424-9300 (Chemtrec)

Section II – Hazard Ingredients/Identity Information

Section III – Physical/Chemical Characteristics

Boiling Point: Not applicable
Vapor Pressure: Not applicable
Vapor Density: Not applicable

Specific Gravity:
Melting Point: Not applicable
Evaporation Rate:

Solubility in Water: 8.6 g/100 ml @ 20°C

Appearance and Odor: White crystalline powder with no odor.

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used): Not combustible (Not applicable)

LEL: Not applicable

UEL: Not applicable

Extinguishing Media: Non-combustible material. Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures: Carbon Dioxide may be generated making necessary the use of a self-contained breathing apparatus (SCBA) and full protective equipment (Bunker Gear). Carbon dioxide is an asphyxiant at levels over 5% w/w. Sodium oxide, another thermal decomposition product existing at temperatures above 1564°F is a respiratory, eye and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.

Unusual Fire and Explosion Hazards: None known

Section V – Reactivity Data

Stable or Unstable? Stable

Conditions to Avoid: Temperatures over 65°C (150°F)

Incompatibility (Materials to Avoid): Reacts with acids to yield carbon dioxide. Also may yield free caustic in presence of lime dust (CaO) and moisture (i.e water, perspiration)

Hazardous Decomposition or Byproducts: Heating above 100°C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Yields sodium oxide if exposed to temperatures above 850°C. Avoid inhalation, eye and skin contact with sodium oxide.

Hazardous Polymerization May Occur or Will Not Occur? Not applicable

Conditions to Avoid:

Section VI – Health Hazard Data

Routes of Entry

Inhalation: Not an eye irritant

Skin: Not a skin irritant

Ingestion: Material is practically non-toxic. Small amounts (1-2 tablespoonfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury. Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

Carcinogenicity: Based on published studies on its effects in animals and humans, sodium bicarbonate is not teratogenic or genotoxic. Only known subchronic effect is that of a marked systemic alkalosis. The material is not listed as a carcinogen or potential carcinogen by IARC, NTP, OSHA or ACGIH.

Health Hazards:

Signs and Symptoms of Exposure:

Medical Conditions Generally Aggravated by Exposure:

Emergency and First Aid Procedure:

Section VII – Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

Waste Disposal Method: Bury in a secured landfill in accordance with all local, state and federal environmental regulations. Empty containers may be incinerated or discarded as general trash.

Precautions to be Taken in Handling and Storing: Store in cool, dry areas and away from uncontaminated residue with water.

Sodium Bicarbonate reacts with acids to yield carbon dioxide gas, which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.

Other Precautions:

Section VIII – Control Measures

Respiratory Protection: Dust mask required if total dust level exceeds 10 mg/m³.

Ventilation

Local Exhaust:

Mechanical:

Special:

Other:

Protective Gloves: General purpose for handling dry product. Impervious gloves when working with solutions.

Eye Protection: Safety glasses when handling bulk material or when dusts are generated.

Other Protective Clothing or Equipment: Full cover clothing. Apron where splashing may occur when working with solutions.

Work/Hygienic Practices: No special requirements with respect to chemical exposure beyond those provided above. Requirements with respect to specific equipment and applications are the responsibility of the user.

Section IX – Additional Information

The information provided in this Material Safety Data Sheet represents data from the manufacturer and/or vendor and is accurate to the best of our knowledge. By providing this information, Delta Education LLC makes no guarantee or warranty, expressed or implied, concerning the safe use, storage, handling, precautions, and/or disposal of the products covered or the accuracy of the information contained in this fact sheet. It is the responsibility of the user to comply with local, state, and federal laws and regulations concerning the safe use, storage, handling, precautions, and/or disposal of products covered in this fact sheet.