



MSDS - Sodium Bicarbonate Baking Soda

February 23, 2011

Section 1. Product Identification

Sodium Bicarbonate Baking Soda

Chemical Ingredient (% by Weight): Sodium Bicarbonate 100%

CAS Number: 144-55-8

Not hazardous under OSHA Standard CFR 1910.1200

Not a WHMIS controlled substance

Emergency Phone: (Canutec) 613-996-6666

Distributed by: Pestell Minerals & Ingredients, New Hamburg, ON Canada

Section 2. Hazards Identification

White crystalline powder

No odor

Not a fire hazard

No significant health or environmental effects associated with this material

WHMIS Rating: Health: 0 Fire: 0 Reactivity: 0

Potential Health Effects

Eye: Not an eye irritant

Skin Contact: Not a skin irritant

Ingestion: Material is practically non-toxic. Small amounts (1-2 tablespoons) 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 (see Note in Section 8).

Inhalation: Not known

Sub-chronic Effects/Carcinogenicity: 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.

Section 3. Physical and Chemical Properties

Appearance: White crystalline powder

Odor: None

Physical State: Solid

pH as is: Not applicable

pH (1% Soln. w/v): 8.2

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Boiling Point: Not applicable

Freezing/Melting Point: Not applicable

Solubility in Water: 8.6 g/100 ml @ 68F

Specific Gravity (Water = 1): 2.2

Apparent Density: (g/cc): Approximately 1

% Volatile: Not applicable

Volatile Organic Compounds: Not applicable

Molecular Weight: 84.02

Section 4. Fire Fighting Measures

Flammable Properties

Flashpoint: Not combustible

Method Used: Not applicable

Flammable Limits

LFL: Not applicable

UFL: Not applicable

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

Fire Fighting Instructions: 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 156F is a respiratory, eye and skin irritant. Avoid inhalation, eye and skin contact with sodium oxide dusts.

Unusual Fire and Explosion Hazards: Not known

Section 5. Stability and Reactivity

Chemical Stability: Stable

Conditions to Avoid: Temperatures above 65C (150F)

Incompatibility with Other Materials: 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 Products: Heating above 100C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Avoid inhalation, eye and skin contact with sodium oxide.

Hazardous Polymerization: Not applicable

Section 6. Toxicological Information

Eye Effects: The material was minimally irritating to unwashed eyes and practically non irritating to washed eyes (rabbit).

Skin Effects: Not a skin irritant or dermally toxic. Not a contact sensitizer

Acute Oral Effects: Acute Oral- rat LD = 7.3 g/kg

Acute Inhalation: Lc50 (rat) > 4.74 mg/1

Aquatic Toxicity: Daphids - EC50 = 4100 mg/1 Bluegill - LC50 = 7100 mg/1 Rainbow Trout - LC50 = mg/1

Persistence: This product is not expected to persist in the environment

Bio Accumulation: This product is not expected to bio-accumulate

Section 7. Accidental Release Measures

Scoop up into dry, clean containers. Wash away uncontaminated residue with water.

Handling and Storage

Store in cool, dry areas and away from incompatible substances (see section 10).

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.

Exposure Controls/Personal Protection

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

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.

Section 8. First Aid Measures

Eyes: Check for and remove contacts. Flood eyes with clean flowing water, low pressure and lukewarm (not hot) if possible, occasionally lifting eyelids.

Ingestion: If large amounts of this material are swallowed, do not induce vomiting. Administer water if person is conscious. Never give anything by mouth to an unconscious person.

Note to Physician: Large doses may produce systemic alkalosis and expansion in extra cellular fluid volume with oedema.

Section 9. Disposal Considerations

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.

Section 10. Transportation Information

D.O.T. Shipping Name: Not regulated

Technical Shipping Name: Sodium Bicarbonate

D.O.T. Hazard Class: None

Disclaimer

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