MATERIAL SAFETY DATA SHEET

SODIUM BICARBONATE, BAKING SODA, CARBONIC ACID MONOSODIUM SALT, SODIUM HYDROGEN CARBONATE, NATRIFOAM 25, 65, 155, 295, 335

ISSUE DATE: January 9, 2012  SUPERSEDES: January 27, 2009

1. **INGREDIENTS:**

<table>
<thead>
<tr>
<th>CAS #</th>
<th>FORMULA</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>144-55-8</td>
<td>NaHCO₃</td>
<td>100</td>
</tr>
</tbody>
</table>

2. **HAZARD IDENTIFICATION:**

<table>
<thead>
<tr>
<th>HMIS RATING</th>
<th>NFPA RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health 0</td>
<td>Health 0</td>
</tr>
<tr>
<td>Flammability 0</td>
<td>Flammability 0</td>
</tr>
<tr>
<td>Reactivity 0</td>
<td>Reactivity 0</td>
</tr>
<tr>
<td>Protection E</td>
<td>Special None</td>
</tr>
</tbody>
</table>

HMIS “E” Rating = Safety glasses, gloves, dust respirator
There are no appreciable health or environmental effects associated with this material

3. **FIRST AID:**

**EYES:** Irrigate with flowing water immediately and continuously for 15 minutes. Consult a physician if necessary.

**SKIN:** Wash off in flowing water or shower. If necessary, consult physician.

**INGESTION:** Seek medical attention immediately if overdose is taken.

**INHALATION:** Remove to fresh air. Seek medical attention if discomfort persists.

**NOTE TO PHYSICIAN:** Large doses, particularly in patients with renal insufficiency, have produced systemic alkalosis and/or expansion in the extra-cellular fluid volume with edema.

4. **FIRE AND EXPLOSION HAZARD DATA:**

- **FLASH POINT:** Non-combustible
- **FLAMMABLE LIMITS:** Not Applicable
- **EXTINGUISHING MEDIA:** Non-combustible
- **FIRE & EXPLOSION HAZARDS:** None

**FIRE FIGHTING EQUIPMENT:** Evolves carbon dioxide when heated. Carbon dioxide is an asphyxiant and self-contained breathing apparatus is necessary if large quantities are involved. Sodium bicarbonate decomposes on heating resulting in formation of sodium carbonate (soda ash) which is an irritant. Avoid contact and inhalation of soda ash.

5. **ACCIDENTAL RELEASE MEASURES**

Sweep up into clean dry containers for salvage or disposal. Wash away uncontaminated residue with water.

6. **HANDLING & STORAGE**

Store in a cool, dry place away from any incompatible materials.

7. **EXPOSURE CONTROL/PERSOAL PROTECTION**

Provide general and/or local exhaust ventilation to control airborne dust.

**Personal Protection (for dusty conditions):**

- Eyes & Face: Safety glasses for dusty conditions
- Respiratory: NIOSH approved dust mask
- Miscellaneous: Full cover clothing, general purpose gloves
8. PHYSICAL DATA:
   APPEARANCE: White crystalline powder  ODOR: Odorless
   SPECIFIC GRAVITY: 2.2  pH (1% solution): 8.2
   MELTING POINT: Decomposes  BOILING POINT: Not Applicable
   VAP PRESS: Not Applicable  VAP DENSITY: Not Applicable
   VOLATILE ORGANIC COMPOUNDS: None  SOL. IN WATER: Moderate

9. STABILITY & REACTIVITY:
   STABILITY: Stable below 150°F.
   INCOMPATIBILITY: Reacts with acids forming a salt, water and carbon dioxide.
   HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and soda ash.
   HAZARDOUS POLYMERIZATION: Will not occur.

10. TOXICOLOGICAL INFORMATION:
    Acute effects of overexposure: Sodium bicarbonate is generally recognized as safe (GRAS) for humans and animals. No significant toxicity is expected.

    Chronic effects of overexposure: Large doses, particularly in patients with renal insufficiency, have produced systemic alkalosis and/or expansion in the extra-cellular fluid volume with edema.

11. ECOLOGICAL INFORMATION
    Bioaccumulation Potential: No bioaccumulation expected.
    Comments: No significant environmental hazards expected.

12. DISPOSAL CONSIDERATIONS:
    Dispose in accordance with pertinent federal, state and local regulations. Empty containers may be incinerated or discarded as general trash.

13. TRANSPORTATION INFORMATION:
    Not regulated by the U.S. Department of Transportation

14. REGULATORY INFORMATION:
    CERCLA (40 CFR 302.4) – Not applicable  S.A.R.A. TITLE III SECTIONS 313 (40 CFR 372) – Not applicable
    TSCA (40 CFR 710) – Listed  OSHA (29 CFR 1910.1200) – Not hazardous
    European Inventory (EINECS)- 205-633-8  Japanese Inventory (MITI)- 1-164
    Food and Drug Administration- Generally recognized as safe (GRAS) direct food additive (21CFR 184.1736).

15. REVISION SUMMARY
    January 18, 2005 - Added Formulations. Replaces MSDS dated March 17, 2004
    April 17, 2007 - Addition to product description. Replaces MSDS dated January 18, 2005
    November 28, 2007 - Removed "Formulas" Replaces MSDS dated April 17, 2007
    January 27, 2009 – Added volatile organic compounds, removed molc. Wgt.
    January 9, 2012 – Additions made to Regulatory Information

16. ADDITIONAL INFORMATION:
    Maximum dose for drinking water corrosion and scale control 100mg/L as per ANSI/NSF 60 - 1988
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