Material Safety Data Sheet
Potassium Bicarbonate

MSDS# 19230

Section 1 - Chemical Product and Company Identification

MSDS Name: Potassium Bicarbonate
Catalog Numbers: P184-500, P235-12, P235-12LC, P235-212, P235-500
Synonyms: Potassium Hydrogen Carbonate; Baking Soda.

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 298-14-6
Chemical Name: Carbonic Acid, Monopotassium Salt
%: 100
EINECS#: 206-059-0

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Caution! May cause eye, skin, and respiratory tract irritation. Target Organs: None.

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract.
Inhalation: May cause respiratory tract irritation.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Get medical aid. Immediately flush eyes with plenty of water for at least 15 minutes.
Skin: Get medical aid. Rinse area with large amounts of water for at least 15 minutes.
Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use agent most appropriate to extinguish fire.
Autoignition Temperature: None.
Flash Point: Not available
Explosion Limits: Lower: None.
Explosion Limits: Upper: None.
NFPA Rating: health: 1; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage
Handling: Use with adequate ventilation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse.
Storage: Store in a cool, dry place. Keep container closed when not in use.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonic Acid, Mono</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
<tr>
<td>potassium Salt</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Carbonic Acid, Monopotassium Salt: None listed
Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits
Personal Protective Equipment

| Eyes: | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
| Skin: | Wear appropriate protective gloves to prevent skin exposure.
| Clothing: | Wear appropriate protective clothing to prevent skin exposure. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

| Physical State: Crystalline powder
| Color: clear to white
| Odor: odorless
| pH: 8.2 (0.1M solution)
| Vapor Pressure: Not available
| Vapor Density: Not available
| Evaporation Rate: Not available
| Viscosity: Not available
| Boiling Point: Decomposes
| Freezing/Melting Point: 100 deg C (212.00°F)
| Decomposition Temperature:
| Solubility in water: Soluble in water.
| Specific Gravity/Density: 2.17
Molecular Formula: KHCO₃
Molecular Weight: 100.1035

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Dust generation.
Incompatibilities with Other Materials: Acidic conditions, bases.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of carbon, oxides of potassium.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 298-14-6: FG1840000
LD50/LC50: RTECS: Not available.
Carcinogenicity: Carbonic Acid, Monopotassium Salt - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: Not regulated as a hazardous material
Hazard Class:
UN Number:
Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: Not available
Risk Phrases:
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)
CAS# 298-14-6: 0

Canada
CAS# 298-14-6 is listed on Canada's DSL List
Canadian WHMIS Classifications: Not controlled.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS# 298-14-6 is not listed on Canada's Ingredient Disclosure List.

US Federal
TSCA
CAS# 298-14-6 is listed on the TSCA
Section 16 - Other Information

MSDS Creation Date: 3/24/1998
Revision #5 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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