**CHEMICAL NAME:** Cryolite  
**COMMON/TRADE NAME:** CRYOFLOX NC-100 and CRYOFLOX NC-600  
**DATE:** September 14, 1992  
**SUPERSEDES:** January 1, 1992 and November 11, 1991

### SECTION I — HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Aluminum Fluoride</td>
<td>15096-52-3</td>
<td>2.5mg/M³ TWA</td>
<td>2.5mg/M³ TWA</td>
</tr>
<tr>
<td>Iron Carbonate</td>
<td>Unknown</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>1309-37-1</td>
<td>10mg/M³ TWA</td>
<td>5mg/M³ TWA</td>
</tr>
<tr>
<td>Calcium Fluoride</td>
<td>7789-75-5</td>
<td>2.5mg/M³ TWA</td>
<td>2.5mg/M³ TWA</td>
</tr>
<tr>
<td>Silicon Dioxide</td>
<td>7631-86-9</td>
<td>0.1mg/M³ TWA</td>
<td>0.1mg/M³ TWA</td>
</tr>
</tbody>
</table>

### SECTION II — PHYSICAL/CHEMICAL CHARACTERISTICS

- **Melting Point:** 1800° F
- **Specific Gravity (H₂O = 1):** 3.0
- **Solubility:** (Water) Slight
- **Appearance and Odor:** Off-White Powder. No Odor.

### SECTION III — REACTIVITY DATA

- **Stability:** Unstable
- **Conditions to Avoid:** Acids.
- **Incompatibility (Materials to Avoid):** Reacts with acids to evolve hydrogen fluoride.
- **Hazardous Polymerization:** May Occur
- **Conditions to Avoid:**
- **Will Not Occur:**

### SECTION IV — FIRE AND EXPLOSION HAZARD DATA

- **Flash Point (Method Used):** None.
- **Extinguishing Media:**
- **Special Fire Fighting Procedures:** Not a fire or explosion hazard.
- **Unusual Fire and Explosion Hazards:**
SECTION V — HEALTH HAZARD DATA

Inhalation. Ingestion.

Health Hazards (Acute and Chronic)

Toxic. Fluorides can cause irritation of the nasal passages, dryness, and nose bleeds. Long time overexposure may result in sclerosis of the bones. This product may contain some crystalline silica (common sand), small amounts of which may be in respirable form and may cause lung damage (silicosis) and cancer risk if long time overexposure occurs.

Carcinogenicity

Crystalline silica (common sand) has been listed by the International Agency for Research on Cancer as a probable human carcinogen.

Signs and Symptoms of Overexposure

Acute: Irritation of the respiratory system. Chronic: Loss of appetite, vomiting and increase in bone density.

Emergency and First Aid Procedures

If swallowed, induce vomiting by giving two glasses of water and sticking finger down throat. Contact physician immediately. On contact with skin, wash with soap and water. On contact with eyes, flush eyes thoroughly with water for 15 minutes. On inhalation of excessive dust, move to fresh air. Seek medical attention if problems persist.

SECTION VI — SPECIAL PROTECTION AND PRECAUTIONS

Ventilation and Engineering Controls

Local Exhaust.

Personal Protective Equipment

NIOSH approved dust filter respirator, rubber gloves and chemical goggles. Also, long-sleeve shirt buttoned at neck and wrists.

Safe Handling, Use and Storage

Normal handling. Store in dry, sealed containers in area free from acid contact.

Protective Measures During Repair & Maintenance

Wear protective equipment listed above.

Other

SECTION VII — SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material is Released or Spilled

Use normal clean-up procedure and place in dry, sealed containers. Flush area of spill/release with water to insure clean-up.

Waste Disposal Method

Follow federal, state and local regulations.

Other Precautions

Follow all other precautions and data noted herein.

NOTE: The data contained in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information herein is based on technical data that Chemalloy believes to be reliable. It is intended to be used by persons with technical skill. Prior to use, users shall conduct their own investigation(s) to determine the suitability of the information for their particular purpose, and appropriate warnings and safe handling procedures should be provided to handlers and users. Any use of this data must be determined by the user to be in accordance with federal, state and local laws and regulations. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents. Since conditions of use and suitability are beyond Chemalloy's control, any risks of use and suitability are therefore assumed by the user, and Chemalloy expressly disclaims all warranties, including warranties of merchantability and fitness for a particular purpose, express or implied, in respect to the use or suitability of the material.