**MATERIAL SAFETY DATA SHEET**

**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**MSDS Name:** Sodium borohydride, powder

**Catalog Numbers:**
- 16940-66-3
- EINECS: 241-004-4

**Hazard Symbols:** T P

**Risk Phrases:** 15 25 34

**SECTION 1 - HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

Appearance: white crystals or crystals. Damage: Water-Reactive. May cause lung damage. May cause severe respiratory and digestive tract irritation with possible burns. May cause severe eye and skin irritation with possible burns. May ignite or explode on contact with certain metals. Contact with water or steam may cause a fire/explosion hazard. Liberation of flammable hydrogen gas. Reacts violently and/or explosively with water, steam or moisture.

**Potential Health Effects**

**Eye:** May cause irreversible eye injury. When substance becomes wet or comes in contact with moisture of the mucous membranes, it will cause burns.

**Skin:** May be absorbed through the skin. May cause severe skin irritation with possible burns. Especially if skin is wet or moist.

**Ingestion:** May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

**Inhalation:** Irritation may lead to chemical pneumonitis and pulmonary edema. May cause severe irritation of the upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. May cause lung damage.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis and dermatitis. May cause lung damage.

**SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS**

**CAS No.:**
- 16940-66-3

**EINECS:** 241-004-4

**SECTION 3 - ACCIDENTAL RELEASE MEASURES**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Do not expose spill to water. Do not get water inside containers.

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not allow water to come into contact with metal, especially copper, for it is potentially violent reaction. Minimize dust generation and accumulation. Keep container tightly closed. Do not inhale dust. Avoid breathing dust. Do not allow breaks in skin to contact with water. Keep from contact with moist air and steam. Store in a cool, dry place. Do not store with oxidizing materials. Store in a well-ventilated area away from incompatible substances. Keep away from water. Store protected from moisture.

**SECTION 4 - FIRST AID MEASURES**

**Exposure Limits**

- OSHA Vacated PEL: To be determined
- ACGIH: To be determined
- NIOSH: To be determined
- OSHA - Final PEL: To be determined

**Eyes:**
- Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

**Skin:**
- Get medical aid immediately. Immediately flush skin with plenty of soap and water at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure.

**Ingestion:**
- Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of water or other fluids. Never give anything by mouth to unconscious person. Get medical aid immediately.

**Inhalation:**
- Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has stopped, start artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

**Notes to Physician:**
- Treat symptomatically and

**SECTION 5 - FIRE FIGHTING MEASURES**

**Physical State:** Crystals

**SECTION 6 - PROTECTIVE EQUIPMENT**

- Chemical Name: Sodium borohydride

**OSHA Vacated PELs:** To be determined

**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 and European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Respirators:** Preferably the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European EN 149 approved respirator when necessary.

**SECTION 7 - PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Crystals