



MAR 15 1991

M A T E R I A L S A F E T Y D A T A S H E E T

EM SCIENCE
A Division of EM Industries
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Gibbstown, N.J. 08027

Preparation Date: AUG 20, '90
Date Sent to Customer.....: MAR 12, '91
Information Phone Number :
(609) 354-9200
Chemtrec Emergency Number:
1-800-424-9300

JOYCE KILBY/RISK MGMT OF
UNIV OF WISCONSIN-WHITEWATER
800 W. MAIN ST-LIBRARY RM 2008
WHITEWATER, WI
53190

NFPA HAZARD RATINGS
Health: 2 Flammability: 1
Reactivity : 2 Special Hazards.: W

Catalog Number(s): SECTION I - GENERAL INFORMATION
SX0380 6371

Chemical Name.....: Sodium Borohydride
Trade Name.....: Sodium Tetrahydroborate (1-)
C.A.S. Number.....: 16940-66-2
Chemical Family...: Inorganic Salt
Formula.....: NaBH₄

Burlog

Molecular Weight.: 37.83
DOT Shipping Name: Water Reactive Solid, n.o.s. (Sodium Borohydride)
DOT Number.....: UN2813

SECTION II - HAZARDOUS INGREDIENTS

None other than specified product.

SECTION III- PHYSICAL DATA

Boiling Point (C° 760 mm Hg) : N/A
Melting Point (C°) : 400 dec
Specific Gravity (H₂O = 1) : 1.074
Vapor Pressure (mm Hg) : N/A 20C
Percent Volatile by Vol (%) : N/A
Vapor Density (Air=1) : N/A
Evaporation Rate (BuAc=1) : N/A
Solubility in Water (%) : 55
Appearance and Odor : White crystalline powder

SECTION IV - FIRE & EXPLOSION HAZARD DATA

Flash Point (F°) : None
Flammable Limits LEL % : N/A
Flammable Limits UEL % : N/A
Extinguishing Media : Use dry chemical; do not use CO₂,
halocarbons, wet chemical or water.
Fire Fighting Proc. :
Wear self-contained breathing apparatus and protective equipment.
Fire & Expl. Hazards :
Reacts with water, acids or transition metal salts to produce
highly flammable hydrogen gas.

SECTION V - HEALTH HAZARD DATA (ACUTE AND CHRONIC)

ACGIH TLV/OSHA PEL (TWA) : None established
Toxicity Data : orl-rat LDLo: 160 mg/kg
Symptoms of Exposure :
Causes burns on contact.
Harmful if inhaled or swallowed.

Medical Cond. Aggravated by Exp: Data not available.
Routes of Entry : Inhalation, ingestion
Carcinogenicity :
The material is not listed (IARC, NTP, OSHA) as cancer causing agent.
Emergency First Aid :
GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE
Eyes: immediately flush thoroughly with large amounts of water.
Skin: immediately flush thoroughly with water for at least 15 minutes.
Inhalation: remove to fresh air; give artificial respiration if
breathing has stopped.
Ingestion: do not induce vomiting; get immediate medical attention.
Remove contaminated clothing and wash before reuse.

SECTION VI - REACTIVITY DATA

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Stability.....: YES

Conditions to Avoid.....:

Extreme heat.
Decomposes to form H2 at 500C.

Materials to Avoid.....: (X) Water (X) Acids
() Bases () Corrosives (X) Oxidizers
(X) Other: Transition metal salts and their solutions

Hazardous Polymerization.: Does not occur

Hazardous Decomposition.: H2

SECTION VII - ENVIRONMENTAL PROTECTION PROCEDURES

Spill Response: Take up and containerize for proper disposal.

Waste Disposal: To be performed in compliance with all current local, state and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

Material must be handled or transferred in an approved fume hood or with equivalent ventilation.
Protective gloves must be worn to prevent skin contact (Neoprene or equivalent).
Safety glasses with side shields must be worn at all times.
Impervious protective clothing should be worn to prevent skin contact.

SECTION IX - SPECIAL PRECAUTIONS

Handling & Storage.....:

Keep container tightly closed.
Store in a cool, dry area away from acids and oxidizers.
Do not breathe dust.
Do not get in eyes, on skin or on clothing.

Work/Hygienic Practices: Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

SECTION X - OTHER INFORMATION

Comments.....: None

Revision History.....: 6/1/82, 12/5/86, 10/27/87, 9/28/88

N/A = Not available: