

SODIUM TETRAHYDROBORATE

1670

October 2006

CAS No: 16940-66-2
RTECS No: ED3325000
UN No: 1426

Sodium borohydride
NaBH₄
Molecular mass: 37.8

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Dry sand. Dry powder. NO water. NO foam. NO carbon dioxide.
EXPLOSION	Risk of fire and explosion on contact with acid(s), alcohol, oxidants, water.		
EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Burning sensation. Cough. Sore throat. Laboured breathing. Shortness of breath.	Local exhaust or breathing protection.	Fresh air, rest. Refer immediately for medical attention.
Skin	Redness. Pain. skin burns.	Protective gloves. Protective clothing.	First rinse with plenty of water, then remove contaminated clothes and rinse again. Refer for medical attention.
Eyes	Redness. Pain. Severe deep burns.	Safety goggles or eye protection in combination with breathing protection.	Rinse with plenty of water (remove contact lenses if easily possible). Refer immediately for medical attention.
Ingestion	Burning sensation in the throat and chest. Abdominal pain. Vomiting. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Give one or two glasses of water to drink. Do NOT induce vomiting. Refer immediately for medical attention.

SPILLAGE DISPOSAL

Remove all ignition sources. Personal protection: P3 filter respirator for toxic particles. Chemical protection suit. Sweep spilled substance into dry, plastic containers. Carefully collect remainder, then remove to safe place.

PACKAGING & LABELLING

UN classification
UN Hazard Class: 4.3
UN Pack Group: I
GHS classification
Signal: Danger
Flame-Corr-Skull
In contact with water releases flammable gases which may ignite spontaneously
Toxic if swallowed
Causes severe skin burns and eye damage

EMERGENCY RESPONSE

Transport Emergency Card: TEC (R)-43GW2-I

SAFE STORAGE

Dry. Well closed. Separated from strong acids, alcohols, powdered metals and water.

IMPORTANT DATA

Physical State; Appearance
WHITE CRYSTALLINE POWDER.

Chemical dangers

The substance decomposes on heating and on contact with acids, powdered metals, water or moisture, forming flammable/explosive gas (hydrogen - see ICSC0001). The substance is a strong reducing agent and reacts violently with oxidants, causing fire and explosion hazard.

Occupational exposure limits

TLV not established.
MAK not established.

Routes of exposure

Serious local effects by all routes of exposure.

Inhalation risk

A harmful concentration of airborne particles can be reached quickly when dispersed.

Effects of short-term exposure

The substance is corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion.

PHYSICAL PROPERTIES

Decomposes at temperature > 250 /C
Density: 1.07 g/cm³
Solubility in water, g/100 ml at 25/C: 55

Auto-ignition temperature: about 220/C
Explosive limits, vol% in air: 3.02 - ?

ENVIRONMENTAL DATA

NOTES

Reacts violently with fire extinguishing agents such as water.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information