



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Sodium Borate NF Decahydrate (Borax)

30-1233

Section 1: Identification

Product Name Sodium Borate NF Decahydrate (Borax)

Commercial Name Not available.

Product Use Industrial manufacturing

Restrictions On Use Not available

Product Code 30-1233

Company PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com: Reproductive toxicity (Category 2) Serious Eye Damage / Eye Irritation (Category 2A)

CFR 1910.1200

Signal Word WARNING

Hazard Statement(s) May damage fertility or the unborn child. Causes serious eye irritation

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P281 Use personal protective equipment as required.
Response	P308 P313 IF exposed or concerned: Get medical advice/ attention.
Storage	P405 Store locked up
Disposal	P501 Dispose of contents/container to an approved waste disposal plant

Section 3: Composition/Information on Ingredients

Substance/Mixture	Substance
Components	Sodium borate
% By Weight	100
CAS#	1303-96-4
Molecular Weight	381.37 g/mole
Chemical Formula	Na ₂ B ₄ O ₇ ·10(H ₂ O)
Synonym(s)	Sodium tetraborate decahydrate, disodium tetraborate decahydrate, borax decahydrate

Mixtures	CAS#	% by Weight	TLV/PEL	LC50/LD50
Name				
Sodium borate	1303-96-4	100	TWA: 0.31 (ppm) TWA: 5 (mg/m3) from ACGIH[1995]	ORAL (LD50):Acute: 2660mg/kg [Rat.].

Section 4: First-Aid Measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact	Wash off with soap and plenty of water. Consult a physician.
Eye Contact	Flush eyes with water as a precaution.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Symptoms/Effects	
Acute	Not available
Delayed	Not available
Immediate Medical Attention	
Not available.	

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Borane/boron oxides, Sodium oxides Not flammable or combustible

Firefighters Special Equipment and Precautions

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: Accidental Release Measures

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for safe handling: Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	Contains no substances with occupational exposure limit values.
Engineering Controls	Not available
Personal Protection	Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100(US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Skin and body protection: Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Appearance	Solid. (Solid crystalline powder.) Color: White.		
Odor	CHARACTERISTIC		
Odor Threshold	Not available		
Melting Point	62 (°C)	pH	Not available
Freezing Point	Not available	Vapor Pressure	NEGLIBLE
Boiling Point/Range	Not available	Vapor Density	Not available.
Decomposition temperature	Not available	Viscosity	Not available.
Partition Coefficient: n-octanol/water	Not available	Evaporation Rate	Not available
Flash Point	Not applicable.	Autoignition temperature	Not available
Flammability	Nonflammable	Flammability or Explosive Limits:	
		Lower	Not available
		Upper	Not available
Solubility(ies)	SOLUBLE		
Other	Density @25 °C 1.71		

Section 10: Stability and Reactivity

Reactivity	None
Chemical Stability	Stable under recommended storage conditions.
Hazardous Polymerization	Not available
Conditions to Avoid	Not available
Incompatible Materials	Strong oxidizing agents, Strong reducing agents
Hazardous Decomposition Products	Hazardous decomposition products formed under fire conditions. - Borane/boron oxides, Sodium oxides

Section 11: Toxicological Information

RTECS	VZ2275000
Acute Toxicity	Oral LD50 LD50 Oral - rat - 4,500 - 5,000 mg/kg Dermal LD50 LD50 Dermal - rabbit - 10,000 mg/kg
Skin Corrosion/Irritation	Not available
Serious Eye Damage/Irritation	Not available
Respiratory or Skin Sensitization	Not available
Germ Cell Mutagenicity	Not available
Carcinogenicity	Not available
Reproductive Toxicity	Presumed human reproductive toxicant
Routes of Entry	Not available

Symptoms Related to Exposure

Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes. Studies with the chemically related boric acid in the rat, mouse and rabbit, at high doses, demonstrate developmental effects on the fetus, including fetal weight loss and minor skeletal variations. The doses administered were many times in excess of those to which humans would normally be exposed. Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid dust and sodium borate dust. A recent epidemiological study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Target Organ(s) No target has been identified in humans. High doses, animal ingestion studies indicate the testes are the target organ.

Section 12: Ecological Information**Ecotoxicity**

Toxicity to fish: LC50 - *Carassius auratus* (goldfish) - 178 mg/l - 72 h Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 1,085 - 1,402 mg/l - 48 h Toxicity to algae IC50 - *Desmodesmus subspicatus* (green algae) - 158 mg/l - 96 h

Persistence and Degradability

Not available

Bioaccumulative Potential

Not available

Mobility in Soil

Not available

Other Adverse Effects

Not available

Section 13: Disposal Considerations**Waste Disposal**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Disposal of Container

Dispose of as unused product.

Other Considerations

Not available

Section 14: Transport Information**DOT Classification**

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA).

Section 15: Regulatory Information**Regulations**

SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312

Hazards Chronic Health Hazard Massachusetts Right To Know Components Disodium tetraborate decahydrate

CAS-No.	Revision Date	1303-96-4	1993-04-24
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Pennsylvania Right To Know Components	Disodium tetraborate decahydrate	CAS-No.	Revision Date
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1303-96-4	1993-04-24	New Jersey Right To Know Components	Disodium tetraborate decahydrate
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CAS-No.	Revision Date	1303-96-4	1993-04-24
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California Prop. 65 Components This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. 16. OTHER CATEGORIES Safety Data Sheet prepared by: Penta The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Penta's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the SDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the SDS. The user should review these regulations to ensure full compliance.

Other

WHMIS Not controlled under WHMIS (Canada). (Canada);DSCL (EEC) R36/38- Irritating to eyes and skin.;Gloves.;Lab coat.;Dust respirator. Be sure to use an approved/certified respirator or equivalent.;Splash goggles.

Section 16: Other Information

Product label text hazard information': • Do not ingest, • Eye Irritant • Ingestion may cause reproductive harm or birth defects based on animal data • Avoid contamination of food or feed. • Not for use in food, drugs or pesticides+ • Refer to MSDS • KEEP OUT OF REACH OF CHILDREN. 'The WHMIS panel format is used for Canadian product. +Except for NF (pharmaceutical grade) products, National Fire Protection Assoc. (NFPA) Classification: Health 1 Flammability 0 Reactivity 0 Hazardous Materials Information Systems (HMIs): Red (Flammability) 0 Yellow: (Reactivity) 0 Blue: (Acute Health) 1' 'Chronic Effects