

MATERIAL SAFETY DATA SHEET

Product: **Sodium Borate (Borax)**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: Sodium Borate (Borax), Fused, Technical

Product Code: CH-13268423A

Chemical Formula: $\text{Na}_2\text{B}_4\text{O}_7$

General or Generic ID: Sodium Baborate; Fused Borax; Sodium Boron oxide; Sodium Tetraborate; Anhydrous Borax

Company

ArtChemicals.com

2250 Davis Street

San Leandro, CA 94577-2204

510-639-4670

Emergency Telephone Number:

1-800-451-8346

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS No.</u>	<u>Chemical Identity</u>	<u>Common Name</u>	<u>%</u>
1330-43-4	N/A	Sodium Borate	100

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye:

Slightly hazardous in case of eye contact (irritant). Symptoms include stinging, tearing, redness and impairment of vision. The degree of injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment. E

Skin:

Slightly hazardous in case of skin contact (irritant). The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. Skin contact can produce inflammation and blistering.

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Ingestion:

Slightly hazardous in case of ingestion. Will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Inhalation:

Slightly hazardous in case of inhalation. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death.

Symptoms of Exposure:

Not available.

Development Information:

Not available.

Cancer Information:

Not available.

Primary Route(s) of Entry:

Not available.

4. FIRST AID MEASURES

Inhalation:

If affected, promptly remove individual to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Do NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. Call physician immediately. If large quantities of this material are swallowed, call a physician immediately. Get medical attention immediately.

Eyes:

Remove contact lenses if worn. In case of contact, immediately flush with water for at least 15 minutes. Do not use eye ointment. Get medical attention.

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Skin:

Immediately remove contaminated clothing and thoroughly flush skin with plenty of water (15 minutes). Wash thoroughly with disinfectant soap and water. Cold water may be use. Launder clothing before reuse. Get medical attention.

Note to Physicians:

Not available.

5. FIRE FIGHTING MEASURES

Flash Point: Non-flammable. Not applicable.

Explosive Limit: Not applicable.

Auto-ignition Temperature: Not applicable.

Hazardous Products of Combustion: Not available.

Extinguishing Media: Not available.

SPECIAL FIRE-FIGHTING PROCEDURES: Not available.

NFPA CODES: Health = Flammability = 0 Reactivity = 0

6. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

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7. PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Keep container tightly closed. Keep in a cool, well-ventilated place. No specific safety phrase has been found applicable for this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Be sure to use an approved/certified respirator or equivalent.

Skin Protection:

Wear resistant gloves. To prevent repeated or prolonged skin contact, wear impervious clothing and boots or lab coat.

Eye Protection:

Chemical splash goggles in compliance with OSHA regulations are advised. Face shield. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Other Protective Clothing or Equipment:

Provide sufficient mechanical ventilation to maintain exposure below level of overexposure. Boots. Full suit. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling product.

TWA: 1 (mg/m³) from ACGIH (TLV) [United States] [1998]

TWA: 1 (mg/m³) [United Kingdom (UK)]

TWA: 1 (mg/m³) from NIOSH [United States]

TWA: 1 (mg/m³) [Mexico]

TWA: 1 (mg/m³) [Canada]

Consult local authorities for acceptable exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White solid. (Odorless.)

Molecular Weight: 201.22 g/mole

pH: Not available.

Product: **Sodium Borate (Borax)**

Boiling Point: Not available.

Melting Point: 741 °C (1365.8 °F)

Specific Gravity: 2.367 (Water=1)

Vapor Pressure: Not applicable.

Evaporation Rate: Not available.

Solubility in Water: Partially soluble in cold water, hot water.

Solubility in water: 1.06 g/100 ml water @ 0 deg. C

Solubility in water: 8.79 g/100 ml water at 40 deg. C

Solubility in water: 2.56 g/100 ml water @ 20 deg. C.

Insoluble in alcohol

10. STABILITY AND REACTIVITY

Incompatibility: Moisture and reducing agents.

Stability: Stable.

Hazardous Decomposition: N/A

Hazardous Polymerization: Will not occur.

Special Remarks on Reactivity: Hygroscopic; keep container tightly closed.

Incompatible with alkaloid salts, mercuric chloride, zinc sulfate, and other metallic salts.

Incompatible with moisture. Forms partial hydrate in moist air.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (LD50): 2400 mg/kg [Rat].

Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit].

Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

May cause adverse reproductive effects.

12. ECOLOGICAL INFORMATION

Not available.

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Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

13. DISPOSAL CONSIDERATION

Waste Disposal Method:

Dispose of in accordance with all applicable local, state and federal regulations.

14. DOT SHIPPING NAME & IDENTIFICATION:

NON-REGULATED. Not as DOT controlled material (United States).

15. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that information is current, applicable, and suitable to their circumstances.