

AERCHEM INC.
320 North Walnut
Bloomington, IN 47408

Telephone: 812.334.9996

Fax: 812.334.1960

Emergency: 800.424.9300

SECTION 1: IDENTIFICATION

Effective Date: 9/26/97

Product Name: **SODIUM BORATE**; sodium tetraborate decahydrate; (anhydrous) sodium tetraborate

Chemical Formula: Na₂B₄O₇ · 10(H₂O); anhydrous - Na₂B₄O₇

C.A.S.: decahydrate: 1303-96-4

anhydrous: 1330-43-4

SECTION 2: HAZARDOUS INGREDIENTS:

Slightly dangerous to dangerous in case of skin contact (irritant), of eye contact (irritant). Very slightly to slightly dangerous in case of skin contact (permeator), of ingestion, of inhalation. May irritate skin and eyes upon contact.

Eyes: Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin: Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage.

Additional symptoms of skin contact may include allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). Passage of this material into the body through the skin is possible, and may add to toxic effects from breathing or swallowing.

Swallowing: Not likely to cause harmful effects during normal handling. Large amounts may be harmful.

Inhalation: This material is a dust or may produce dust.

Symptoms of exposure: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), hair loss, shock

SECTION 3: PHYSICAL DATA

Physical state and appearance:	solid, white crystalline powder, odorless
Boiling point:(760 mmHg)	decomposes
Melting Point	75°C (167°F)
Specific Gravity (Water = 1):	1.73
Solubility in water:(by weight)	soluble in cold water, hot water; Insoluble in methanol
Vapor Density:	n/a
pH	10.0

SECTION 4: FIRE AND EXPLOSION DATA

Flash point:	nonflammable
Flammable limit:	n/a
Extinguishing Media:	n/a
Unusual Fire and Explosion Hazards:	none

SECTION 5: REACTIVITY DATA

Stable X Unstable

Conditions to Avoid: slightly reactive with oxidizing agents

Hazardous Decomposition or byproducts: some metallic oxides

Hazardous Polymerization: n/a

SECTION 6: HEALTH HAZARD DATA

Permissible Exposure Limit: TWA: 0.31 ppm;

TWA 5 mg/m³ from ACGIH 1995
OSHA VPEL 10.000 mg/m³ - TWA (anhydrous)
acute oral LD₅₀ rat: 2660 mg/kg
ingestion; Ingestion of 5-10 grams has produced severe vomiting, diarrhea, shock and death.

Toxicity:

Route of Entry:

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SECTION 7: SPILLAGE AND DISPOSAL PROCEDURES

Spillage: Use appropriate tools to put spilled solid in convenient waste disposal container. If necessary, neutralize residue with dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Disposal: Consult with federal, state, and local authorities.

SECTION 8: HANDLING AND STORAGE

Containers of this material may be hazardous when emptied. Since emptied containers retain products residues, (vapor, liquid, and/or solid), all hazard precautions must be observed.

SECTION 9: FIRST AID PROCEDURES

Eyes: Remove any contact lenses. Flush eyes with cold running water for at least 15 minutes, keeping eyelids open. Do not use eye ointment. Seek medical attention. Cold water may be used.

Skin: Wash with plenty of water. Gently wash skin with running water and non-abrasive soap. Be careful to clean folds, crevices, creases, and groin. Cold water may be used.

If on skin, neutralize with dilute solution of boric acid or acetic acid. Cover irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.

Inhalation: Allow victim to rest in well ventilated area. Seek medical attention.

Ingestion: Remove any dentures. Have *conscious* person drink several glasses of milk or water. Induce vomiting by sticking finger in throat. Seek medical attention.

SECTION 10: SPECIAL PROTECTION INFORMATION

Ventilation: Adequate general, process enclosures, or local exhaust ventilation.

Eye Protection: Splash goggles

Protective Gloves: impervious

Respiratory Protection:

Other Protective Gear: lab coat

SECTION 11: TRANSPORT INFO:

DOT classification: not regulated