

SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Winter Close-Up

Alternate Product: Sodium tetraborate pentahydrate, disodium tetraborate,

General Use: product used in industrial manufacturing (cleansers, detergents)

Manufacturer:

QUALCO, INC.
225 Passaic Street
Passaic, NJ 07936

Emergency Telephone Numbers:

800-424-9300 (CHEMTREC – US)
973-473-1222 (Qualco, Inc.)

2. Hazards Identification

Classification of the Substance:

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

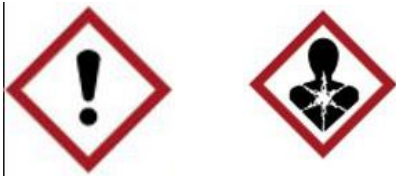
Reproductive toxicity (Category 2) H361 Suspected of damaging fertility or the unborn child

Eye Irritant: (Category 2) H319 Causes serious eye irritation

Acute Oral (Category 5) H303 May be harmful if swallowed

GHS Label Elements, including precautionary statements

Signal Word: WARNING



Hazard Statements

Suspected of damaging fertility of the unborn child. Causes serious eye irritation. May be harmful if swallowed.

Precautionary Statements

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Wash thoroughly after handling. Wear protective gloves/protective equipment as required.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical/advice attention.

Store product in tightly closed container and locked up. Dispose of contents/container to an approved waste disposal plant.

Additional Information: For full text of R-S phrases as well as Hazard Class/Statements and Precautionary Statements, see section 16.

Other Hazards: Emergency Overview: Sodium tetraborate decahydrate is a white odorless, powdered substance that is not flammable, combustible, or explosive, and has low acute oral and dermal toxicity.

Potential Health Effects: Inhalation is the most significant route of exposure in occupational and other settings. Dermal exposure is not usually a concern because borax decahydrate is poorly adsorbed through intact skin.

Inhalation: Occasional mild irritation effects to nose and throat may occur from inhalation of sodium tetraborate decahydrate dusts at levels higher than 10 mg/m³

Eye Contact: Sodium tetraborate decahydrate is a serious eye irritant

Skin Contact: Sodium tetraborate decahydrate does not cause irritation to intact skin.

Ingestion: Products containing sodium tetraborate decahydrate are not intended for ingestion. Sodium tetraborate decahydrate has low acute toxicity. Small amounts (e.g. a teaspoonful) swallowed accidentally are not likely to cause effects, swallowing larger than that may cause gastrointestinal symptoms.

Reproductive/Developmental: Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects. A human study of occupational exposure to borate dust showed no adverse effect on reproduction. A recent epidemiological study and a peer reviewing report of the past epidemiological studies conducted in China didn't show any negative effect of boron on human fertility (10, 11).

Potential Ecological Effects: Large amounts of sodium tetraborate decahydrate can be harmful to plants and other species. Therefore releases to the environment should be minimized.

Signs and symptoms of exposure: Symptoms of accidental over-exposure to sodium tetraborate decahydrate have been associated with ingestion or absorbed through large areas of damaged skin. These may include nausea, vomiting and diarrhea with delayed effects of skin redness and peeling (See section 11).

3. Composition & Information on Ingredients

This product contains greater than 99.9 percent (%) sodium tetraborate decahydrate (Na₂B₄O₇ · 10H₂O)

Chemical Name	CAS #	Wt. %	EC No.
Sodium Tetraborate	1303-96-4	99.9%	215-540-4

4. First Aid Measures

General Advice: Move out of dangerous area. Seek medical attention. Show this safety data sheet to the doctor in attendance.

Skin Contact: Wash with soap and water. Seek medical attention.

Eye Contact: As with any chemical exposure to the eye, flush eyes with water for at least 15-20 minutes. Seek medical attention.

Inhalation: If symptoms such as nose or throat irritation are observed, remove person to fresh air. If not breathing, give artificial respiration. Seek medical attention.

Ingestion: If large amounts are swallowed (i.e. more than one teaspoon) give two glasses of water or milk to drink and seek medical attention. Never give anything by mouth to an unconscious person.

Note to Physicians: Observation only is required for adult ingestion of less than 7 grams of sodium tetraborate decahydrate. For ingestion in excess of 7 grams, maintain adequate kidney function and force fluids. Gastric lavage is recommended for symptomatic patients only. Hemodialysis should be reserved for massive acute ingestion or patients renal failure. Sodium tetraborate analyses of urine or blood are only useful for documenting exposure and should not be used to evaluate severity of poisoning or to guide treatment (1) (see section 11)

Indication of any immediate medical attention and special treatment needed: No data available.

5. Fire Fighting Measures

Extinguishing Media: Not combustible, use extinguishing method suitable for surrounding fire.

Specific Hazards arising from chemical: None. Substance is non-flammable, combustible or explosive. The product is itself a flame retardant.

Special Protective Actions for fire-fighters: Firefighters should wear pressure demand, self-contained breathing apparatus and full turn-out gear.

Fire/Explosion Hazards: Not applicable

Flammable Limits: Not applicable.

6. Accidental Release Measures

Personal Precautions: Avoid dust formation. In case of exposure to prolonged or high level of airborne dust, wear a personal respirator in compliance with national legislation.

Environmental Precautions: Sodium tetraborate decahydrate is a water soluble white powder that may, at high concentrations cause damage to trees or vegetation by root absorption (see section 12)

Methods and materials for containment and cleaning up

Land Spill: Vacuum, shovel or sweep up sodium tetraborate decahydrate and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during clean up and disposal. No personal protective equipment is needed to clean up land spills.

Spillage into Water: Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the boron value to its normal environmental background level (see sections 12, 13 and 15).

Reference to other Sections: See sections 8 and 13 for further information.

7. Handling and Storage

Handling: To maintain package integrity and to minimize caking of the product, product should be handled on a first-in, first-out basis. Good housekeeping and dust prevention procedures should be followed to minimize dust generation and accumulation. Your supplier can advise you on safe handling. Please contact supplier. The product should be kept away from strong reducing agents. Apply above handling advice when mixing with other substances.

Conditions for safe storage: Keep containers closed and store indoors in a dry, well ventilated location. Provide appropriate ventilation and store as such to prevent any accidental damage.

8. Exposure Controls / Personal Protection

Control Parameters: Occupational exposure limits for dust (total and respirable) are treated by OSHA, Cal OSHA and ACGIH as Particulate Not Otherwise Classified or Nuisance Dust.

Respect regulatory provisions for dust (total and respirable)

ACGIH/TLV: 10 mg/m³

Cal OSHA/PEL: 10 mg/m³

OSHA/PEL (total dust): 15 mg/m³

OSHA/PEL (respirable dust)

DNEL values:

Exposure Pattern	Type/site of Effect	Exposure Route	DNEL value
DNELs for Workers			
Acute	Local	Inhalation	22.3 mg/m ³
Long Term	Systemic	Inhalation	12.8 mg/m ³
Long Term	Systemic	Dermal	42478 mg/day
DNELs for the General Public			
Acute	Systemic	Oral	1.5 mg/kg bw/day
Acute	Local	Inhalation	22.3 mg/m ³
Long Term	Systemic	Dermal (external)	303.5 mg/kg bw/day
Long Term	Systemic	Dermal (systemic)	1.5 mg/kg bw/day
Long Term	Systemic	Inhalation	6.5 mg/m ³
Long Term	Systemic	Oral	1.5 mg/kg
Long Term	Local	Inhalation	22.3 mg/m ³

Source: Chemical Safety Report of disodium tetraborate

PNEC Values

PNEC add freshwater, marine water = 1.35 mg B/L

PNEC add aqua intermittent = 9.1 mg B/L

PNEC add fresh water sediment marine water sediment = 1.8 mg B/kg sediment dry weight

PNEC soil = 5.4 mg B/kg soil dry weight

PNEC add STP = 1.75 mg B/L

Source: chemical Safety Report of Boric Acid

Exposure controls

Appropriate Engineering Controls: Maintain air concentrations below occupational exposure standards.

Use local ventilation to keep airborne concentrations of sodium tetraborate decahydrate dust below permissible exposure levels. Wash hands before breaks and at the end of the workday. Remove and wash soiled clothing.

Individual Protection Measure (Personal Protective Equipment)

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN143) 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).

Eyes and Hand Protection: Handle with gloves. Wear eye protection suitable for job tasks.

Environmental exposure controls: No special requirement.

9. Physical and Chemical Properties

Physical State:	Tablet, Solid
Color:	White
Odor:	Odorless
Odor Threshold:	No data available
Molecular Weight:	381.37
Specific Gravity:	1.71-1.73 gr/cm ³ @20oC
pH@20°C (1% solution):	9.2
Melting Point:	741°C (heated in closed space)
Boiling Point:	1575°C

Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Explosive Limits:	Not applicable
Vapor Pressure:	Negligible
Vapor Density:	Not applicable
Relative Density:	1.72@20°C
Solubility in Water:	4.7%@20°C
Auto-Ignition Temperature:	Not applicable
Viscosity:	Not applicable
Exposure Hazard:	Not applicable
Oxidizing Properties:	Not applicable
Bulk Density:	62.43 lbs/ft (1.0 ton/m ³)

10. Stability and Reactivity

Reactivity: No data available

Chemical Stability: sodium tetraborate decahydrate is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. When heated it loses water, eventually forming anhydrous sodium tetraborate decahydrate.

Possibility of hazardous reactions: Reaction with strong reducing agents such as metal hydrides, acetic anhydride or alkali metals will generate flammable hydrogen gas which could create an explosive hazard.

Conditions to Avoid: Exposure to moisture and incompatible materials.

Incompatible Materials: Avoid contact with strong reducing agents such as metal hydrides, acetic anhydride or alkali metals.

Hazardous decomposition Products: Borates, hydrogen, boron oxides.

11. Toxicological Information

Acute Toxicity: Low acute oral toxicity. LD50 in rats is 6,000 mg/kg of body weight

Skin Corrosion/Irritation: Low acute dermal toxicity; LD50 in rabbits is greater than 2,000 mg/kg of body weight. Sodium tetraborate decahydrate is poorly adsorbed through intact skin. Non-irritant.

Serious Eye Damage/Irritation: Sodium tetraborate decahydrate is a serious eye irritant.

Respiratory or Skin Sensitization: Sodium tetraborate decahydrate is not a skin sensitizer.

Germ cell mutagenicity/carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than of equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated effects on fertility and testes (2). Studies with chemically related boric acid in 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 which humans would normally be exposed to (3, 4, 5). 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 epidemiology study under the conditions of normal occupational exposure to borate dusts indicated no effect on fertility.

Aspiration Hazard: Low acute inhalation toxicity; LC₅₀ rats is greater than 2.0 mg/l (or g/m³)

12. Ecological Information

Sodium tetraborate decahydrate occurs naturally in sea water at an average concentration of 5 mg B/l and fresh water at 1 mg B/l or less. In dilute aqueous solutions the predominant boron species is undissociated boric acid.

Toxicity: Sodium tetraborate decahydrate is an essential micronutrient for healthy growth of plants, however it can be harmful to boron sensitive plants in higher quantities. Care should be taken to minimize the amount of borate product released to the environment.

Algal toxicity: Green algae pseudokirchneriella subcapitata 72 hr EC50 – biomass = 40 mg B/L or 229 mg boric acid/L.

Invertebrate Toxicity: Daphnia, Daphnia magna 48 hr LC50 = 133 mg B/L or 760 mg boric acid/L or 619 mg disodium tetraborate, anhydrous/L

Fish Toxicity: Fish, fatheted minnow Pimephales promelas 48 hr LC50 = 79.7 mg B/L or 456 mg boric acid/L or 370 mg disodium tetraborate anhydrous

Persistence and degradability: Sodium tetraborate is naturally occurring and ubiquitous in the environment.

Bio-accumulative Potential: Not significantly bio-accumulative.

Mobility in Soil: This product is soluble in water and is leachable through normal soil

Results of PET and vPvB Assessment: No data available

Other Adverse Effects: No data available

13. Disposal Considerations

Dispose of in accordance with all local, state, and federal regulations. Contact a licensed waste disposal service to dispose of this material. Surplus product should, if possible, be used for an appropriate application.

14. Transportation Information

Sodium tetraborate decahydrate has no UN number, and is not regulated under international rail, road, water or air transport regulations.

US DOT: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

15. Regulatory Information

It should be noted that borates are safe under conditions of normal handling and use, besides, they are essential nutrients to plants, and research shows that they play a beneficial role in human health.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III. Section 302.

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 II, Section 313

SARA 311/312 Hazards: Chronic Health Hazard

Massachusetts Right To Know Components: Disodium tetraborate decahydrate CAS #1303-96-4

Pennsylvania Right To Know Components: Disodium tetraborate decahydrate CAS #1303-96-4

New Jersey Right To Know Components: Disodium tetraborate decahydrate CAS #1303-96-4

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

Clean Air Act: Sodium tetraborate decahydrate was not manufactured with and does not contain any Class 1 or Class I ozone depleting substances.

16. Other Information

H361: Suspected of damaging fertility or the unborn child

H319 Causes serious eye irritation

H303 May be harmful if swallowed

Revision Date: May 2016

Disclaimer: The information in this SDS was obtained from sources which we believe to be reliable. However the information is provided without any warranty, express or implied, regarding its accuracy, reliability or completeness. The conditions or methods of handling, storage use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. This SDS was prepared and is to be used only for this product.