



1	PRODUCT AND COMPANY IDENTIFICATION
Product Identifier:	Non Chlorine Winter Cartridge
Common Name:	Borax
SDS Number:	63
Revision Date:	4/9/2018
Version:	1
CAS Number:	1303-96-4
EPA Number:	3432-72
Product Description:	White, odorless, crystalline powder
Product Use:	Algae treatment, scale control, water softner
Instructions:	Only in the event of a transportation emergency involving spills, leaks, fires or accidents call Chemtrec at (800) 424-9300
Supplier Details:	N. Jonas & Co., Inc.
	4520 Adams Circle, P.O. Box 425
	Bensalem, PA 19020
Phone:	215-639-8071

HAZARDS IDENTIFICATION

Classification of Substance

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GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Serious Eye Damage/Eye Irritation, 2 A Health, Reproductive toxicity, 1 B

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:



GHS Hazard Statements:

H319 - Causes serious eye irritation

H360 - May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)

GHS Precautionary Statements:

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P264 - Wash skin thoroughly after handling.

P280 - Wear protective gloves/ eye protection/ face protection.

P281 - Use personal protective equipment as required.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 - IF exposed or concerned: Get medical advice/ attention.

P337 + P313 - If eye irritation persists: Get medical advice/ attention.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

- Route of Entry: Inhalation; Ingestion; Eyes;
- **Target Organs:** Eyes; Nose; Gastrointestinal system;

Inhalation: Dust may cause mucous membrane irritation with coughing, dryness and sore throat.





Skin Contact:	Non-irritating to intact skin Absorption through large areas of damaged skin may produce symptoms similar to those following ingestion
Eye Contact:	Direct contact with powder or dusts may cause irritation with redness, pain, blurred vision and possibly injury.
Ingestion:	May cause gastrointestinal disturbance such as headache,nausea,vomiting abdonminal pain, and diarrhea with delayed effects of skin redness and peeling

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COMPOSITION/INFORMATION ON INGREDIENTS

Chemical I	Ingredients
CAS# %	Chemical Name
***** *****	Proprietary Proprietary

4	FIRST AID MEASURES
Inhalation:	Immediately remove from exposure area to freshen air. Keep affected person warm and at rest. Treat symptomatically and supportively. Contact physician or local poison control center. If breathing has stopped, give artificial respiration, and get medical attention immediately.
Skin Contact:	Remove contaminated clothing and shoes. Rinse affected are with soap and plenty of water until no evidence of product remains
Eye Contact:	Immediately rinse eyes with plenty of water,ocassionally lifting upper and lower lids, until no evidence of product remains. Get medical attention if pain or irritation persist.
Ingestion:	Treat symptomatically and supportively. Maintain airway and respiration. If vomiting occurs, keep head in a position to prevent aspiration of vomitus. Dilution by rinsing the mouth and giving water or milk to drink is generally recommend. If unconscious, the victim should not be given anything to drink. Contact physician or local poison control center.

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 FIRE FIGHTING MEASURES

 Flash Point:
 Product is not flammable, combustible, or explosive

Flash Point Method:	Product is not flammable, combustible, or explosive
Burning Rate:	None
Autoignition Temperature:	None

If material is involved in a fire, it may melt to a glassy material which can flow in large quantities and ignite surrounding combustible materials. Avoid generation of dust

Extinguish using agent suitable for type of surrounding fire.

Product is fire retardant

Wear full protective clothing including self-contained breathing apparatus with full face shield operated in pressure demand or other positivepressure mode.

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ACCIDENTAL RELEASE MEASURES

Sweep up an place in suitable clean,dry container for reclamation or later disposal. Small residual amounts of material may be flushed with water to the sewer. Keep unnecessary people away. Avoid generation of dust.

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HANDLING AND STORAGE

Handling Precautions:

Avoid generation of dust. Avoid contact.



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Non Chlorine Winter Cartridge

Storage Requirements:

Store away from incompatible substances. Store in a cool, dry place. Keep container tightly closed when not in use. Observe all federal, state, and local regulations when storing.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	Use ventilation adequate to maintain safe levels. Safety shower and eyebath should be provided. Do not eat,drink or smoke until showering and changing clothes
Personal Protective Equipment:	Air contamination monitoring should be carried out, where dusts are likely to be generated, to assure that that employees are not exposed to harmful concentration the above permissible exposure limits. If respiratory protection is required, it must be based on the contamination levels found in the workplace, must not exceed the working limits of the respirator and be jointly approved by NIOSH-MSHA. Protective impervious clothing is required where repeated or prolonged skin contact may occur. Chemical resistant gloves are required where repeated or prolonged contact may occur. Dust-proof safety glasses are required to prevent eye contact where dusty conditions are anticipated.

Minimize exposure in accordance with good industrial hygiene practice. Seek medical advice in case of contact with eyes , skin or if swallowed

9	PHYSICAL AND CHEMICAL PROPERTIES				
Appearance:	White	White Crystalline Powder			
Specific Gravity or Density:	48 lbs/cubic ft.		Solubility:	5.8% @ 20 degC	
Boiling Point:	Melting Point: 144 degF (62 degC)		Percent Volatile:	N/A	
Vapor Pressure:	N/A		Vapor Density:	N/A	
Potentia Hydrogenii:	9.25 @	9.25 @ 20 degC (3% solution			
10	STAB	ILITY AND REACTIVITY			
Reactivity:		Stable under normal conditions			
Chemical Stability:		Stable under normal conditions	under normal conditions		
Materials to Avoldentification:		Incompatible with strong oxidizers, acids, zirconium.			
Hazardous Decomposition:		Thermal decomposition products may include toxic oxides of sodium and boran			
Hazardous Polymerization:		Hazardous polymerization has not been reported to occur under normal temperature conditions and pressure.			

TOXICOLOGICAL INFORMATION

Borax (B4Na2O7.10H2O) cas#:(1303-96-4) []

Information on toxicological effects

Acute toxicity: LD50 Oral - rat - 4,500 - 5,000 mg/kg Inhalation: no data available

LD50 Dermal - rabbit - 10,000 mg/kg

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

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Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

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.

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 or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: fetotoxicity Presumed human reproductive toxicant

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: VZ2275000

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 cronic exposures to boric acid dust and sodium borate dust. A recent epidemiological study under the conditions of normal occupational eposure to borate dusts indicated no effect on fertility.

Carbonic acid disodium salt cas#:(497-19-8) []

Information on toxicological effects

Acute toxicity: LD50 Oral - rat - 4,090 mg/kg LC50 Inhalation - rat - 2 h - 5,750 mg/l Dermal: no data available

Skin corrosion/irritation: Skin - rabbit Result: Mild skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit Result: Eye irritation - 24 h

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

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 or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: VZ4050000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

12 ECOLOGICAL INFORMATION

Borax (B4Na2O7.10H2O) cas#:(1303-96-4) []

Information on ecological effects

Toxicity:

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

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

Carbonic acid disodium salt cas#:(497-19-8) []

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h. Toxicity to daphnia and EC50 - Daphnia magna (Water flea) - 265 mg/l - 48 h. other aquatic invertebrates

Persistence and degradability: no data available





Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: no data available

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DISPOSAL CONSIDERATIONS

Borax (B4Na2O7.10H2O) cas#:(1303-96-4) []

Waste treatment methods

Product: 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.

Contaminated packaging: Dispose of as unused product.

Carbonic acid disodium salt cas#:(497-19-8) []

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

TRANSPORT INFORMATION

Not Regulated

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15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Borax (B4Na2O7.10H2O) (1303-96-4) [n/a%] MASS, OSHAWAC, PA, TSCA, TXAIR

Carbonic acid disodium salt (497-19-8) [n/a%] TSCA

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List

OSHAWAC = OSHA Workplace Air Contaminants

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act



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TXAIR = TX Air Contaminants with Health Effects Screening Level

OTHER INFORMATION

HMIS III: Health = 1, Fire = 0, Physical Hazard = 0

HMIS	
HEALTH	1
FLAMMABILITY	0
PHYSICALHAZARD	0
PERSONAL PROTECTION	