



MATERIAL SAFETY DATA SHEET

Product Name **Shox All Plus**
Product id 9717AZ
Revision date 07/02/2010

Revision: 1

1. Identification of the substance & the company

Trade name Shox All Plus
Chemical family Chloroisocyanurate
Type of product and use Swimming Pool Sanitizer
Supplier NAVA Water Products
95 MacCorkle Ave. SW, South Charleston, WV 25303,
USA
Tel: (304) 746-3000
Emergency Telephone Chemtrec (800)424-9300

2. Hazards identification

Emergency overview *White granules*
Strong oxidizing agent
Corrosive
Causes irreversible eye damage and skin burns
May be fatal if inhaled
May be fatal if absorbed through skin
Irritating to nose and throat
Harmful if swallowed

Potential Health Effects:

- Eye Contact Causes irreversible eye damage. Dust or vapors can cause irritation, redness, tearing and burns.

- Skin contact Dry crystalline material is non-irritating initially. Prolonged contact will probably induce chemical burns. Burns are induced when moisture is added.

- Inhalation May be fatal if inhaled.

- Ingestion Harmful if swallowed

NFPA Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 2.



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HMIS Ratings (Scale 0-4) Health = 3, Fire = 0, Reactivity = 2

3. Composition / information on ingredients

Components	CAS No.	Weight %
DICHLOROISOCYANURIC ACID, SODIUM SALT OF	2893-78-9	57
Other ingredients	Confidential	43

4. First-aid measures

Eye contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advise.

Skin contact Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advise. Take off contaminated clothing. Have the product container or label when calling a poison control center or doctor or going for treatment.

Inhalation Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise. Have the product container or label when calling a poison control center or doctor or going for treatment.

Ingestion Call poison control center, or doctor immediately for treatment advise. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Note to physician Probable mucosal damage may contraindicate the use of gastric lavage.

5. Fire - fighting measures

Suitable extinguishing media Water



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Extinguishing media not to be used	Reacts with various metal powders, with risk of fire and explosion.
Fire fighting procedure	Cool containers with water spray. Do not use ABC or other dry chemical extinguishers since there is the potential for a violent reaction. Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

Unusual fire and explosion hazards	When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine and CO. Contamination with moisture, organic matter or other chemicals may start a chemical reaction with generation of heat.
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6. Accidental release measures

Personal precautions,	Wear impervious gloves, mask and chemical tight goggles. Sweep up leaks or spills of this material with dry broom and dissolve in water. After that, neutralize this solution with sodium thiosulfate or sodium sulfate and discard it while controlling temperature and pH.
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7. Handling and storage

Handling	Do not take internally. Do not breath dust. Avoid contact with skin, eyes, and clothing. Upon contact with skin or eyes, wash off with water.
Storage	Store in a dry, cool (125°F, 52°C), well ventilated area away from incompatible materials (see "materials to avoid"). Product has a shelf life limitation of three years if stored in a cool, dry place. Keep containers tightly closed.



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8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
DICHLOROISOCYANURIC ACID, SODIUM SALT OF 2893-78-9	Not determined	Not determined
Other ingredients	Not determined	Not determined

Ventilation requirements Use local exhaust as necessary, especially under dusty conditions.

Personal protective equipment:

- **Respiratory protection** When dusty conditions are encountered, wear a NIOSH/OSHA full-face respirator with chlorine cartridges for protection against chlorine gas and dust/mist pre-filter.
- **Hand protection** Neoprene gloves
- **Eye protection** Chemical safety goggles
- **Skin and body protection** Impervious body covering clothes, boots and neoprene apron

Hygiene measures Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Appearance White granules
Odor Slight chlorine
Boiling point/range Not applicable
Vapour pressure Not applicable under standard conditions
Vapor density No data
Solubility:
- **Solubility in water** 25g/100ml at 25°C
Bulk density 0.87 g/cc
pH 2.8 (1% solution)
Decomposition temperature 240°C



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10. Stability and reactivity

Stability Stable under normal conditions. Do not package in paper or cardboard.
NOTE: Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes.

Materials to avoid Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.
Contamination with oils and greases may cause decomposition with formation of carbon dioxide and chlorine. This product may form an explosive mixture with calcium hypochlorite. In a formulation containing this mixture as the major component, alkaline materials such as soda ash (Na_2CO_3) in the presence of moisture may cause violent decomposition and fire. It is dangerous to contact alcohols, ethers, biuret and solvents (toluene, xylene, terpentine, ect.)

Conditions to avoid Heating above decomposition temperature

Hazardous decomposition products Nitrogen trichloride, chlorine, carbon monoxide
cyanic acid

Hazardous polymerization Will not occur

11. Toxicological information

Chronic toxicity Toxicological investigation indicate this chemical does not produce significant effects from chronic exposure.

Carcinogenicity Not classified by IARC, OSHA, EPA.
Not included in NTP 11th Report on Carcinogens

12. Ecological information

Information on ecological effects Toxic to aquatic organisms.
Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the Permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying to sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.



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13. Disposal considerations

Waste disposal Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Do not put this product, spilled product, or filled or partially filled containers into the trash or waste compactor.

Disposal of Packaging PLASTIC PAIL: Triple rinse (or equivalent), Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or if allowed by State and local authorities, by burning. If burned stay out of smoke.
HOUSEHOLD CONTAINERS: Do not reuse container. Rinse thoroughly before discarding in trash. Securely wrap container in several layers of newspaper and discard in trash.

14. Transportation information

DOT Not regulated

15. Regulatory information

USA This product is a registered pesticide under FIFRA.
Reported in the EPA TSCA Inventory

- California-Prop 65 This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.



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16. Other information

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, NAVA Water Products makes no representations as to the completeness or accuracy thereof.

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End of safety data sheet