



# PoolProof®

## Hexaborate Water Harmonizer®

**pH balanced, micro-micellar borate emulsion  
for all pools and spas**

### APPLICATION INSTRUCTIONS

**PoolProof Hexaborate Water Harmonizer** is a pH balanced, micro-micellar borate emulsion that provides the following benefits:

- Stabilizes pH to correct level (7.6–7.8)
- Reduces pump time
- Makes water sparkle
- Makes skin feel smooth
- Relieves eye irritation
- Reduces chlorine loss
- Helps maintain quality with lower cyanuric acid levels.

**PoolProof Hexaborate Water Harmonizer** comes as a pre-mixed, ready-to-use liquid. It is compatible with all materials used in the normal maintenance of swimming pools, including saltwater pools and spas.

Using the table on this page, add the correct amount of material in your pool water to achieve a minimum of approximately 38 ppm of boron. For the first application, mix 1 (one) gallon of **PoolProof Hexaborate Water Harmonizer** to every 3000 gallons of pool water, and mix 1/6 gallon to every 500 gallons of spa water (approximately 38 ppmB). For problem or high-load pools, add PoolProof to increase ppm level up to 80 ppm to improve performance (up to two gallons of PoolProof per 3000 gallons of pool water). **Shake well** before pouring into pool over the top of one of the outflow jets while pump is operating. Rinse empty container with pool water and add to pool. Run pump to achieve complete turnover, then test the pH level. It should be 7.6–7.8. Storage at high temperatures or for extended periods of time is expected to cause settling. Settled product may take longer to dissolve, but will not affect performance.

Water loss from filter backwash, splash-out, rainfall draining or winterizing draw down will reduce the amount of **PoolProof Hexaborate Water Harmonizer**. Use a Boron Indicator Test to maintain 36–50 ppm of boron and add product as needed. **PoolProof Hexaborate Water Harmonizer** does not evaporate and is not degraded by sunlight.

Size of Pool/ Spa (gallons)	PoolProof (gallons)	Size of Pool/ Spa (gallons)	PoolProof (gallons)
500	1/6 (22 ozs.)	15,000	5
1,000	1/3 (43 ozs.)	18,000	6
2,000	2/3 (86 ozs.)	21,000	7
3,000	1	24,000	8
6,000	2	27,000	9
9,000	3	30,000	10
12,000	4	45,000	15

If your pool or spa size is not listed, add or subtract **PoolProof Hexaborate Water Harmonizer** using the table above to help calculate the specific amount of product you need.

### Winterization

A pool that has been treated with **PoolProof Hexaborate Water Harmonizer** will remain sparkling clear during the winter season with minimal effort. Before shutting the pool down for the winter, test the water to make sure that an adequate level of **PoolProof Hexaborate Water Harmonizer** is present (36–50 ppm of boron)..

### DIRECTIONS FOR USE

#### Notice

Read and understand the entire label before using. Use only according to label directions.

Before buying or using this product, read **Warranty Limitations and Disclaimer** statement found elsewhere on this label. If terms are unacceptable, return unopened package to seller for full refund of purchase price. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under **Warranty Limitations and Disclaimer**.

### Storage and Disposal

**Storage:** Store in a cool, dry (preferably locked) storage area inaccessible to children and pets. Do not freeze. **Disposal:** If empty: Do not reuse this container. Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

### First Aid

- Not an inhalation hazard
- Non-irritating to eyes and skin
- Not absorbed through intact skin.
- **PoolProof Hexaborate Water Harmonizer** is of low toxicity and ingestion of a small amount accidentally (e.g., a teaspoon) will not cause harm. For ingestion of large amounts, contact a poison control center or doctor for further treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information

### Warranty Disclaimer

Manufacturer warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. **EXCEPT AS EXPRESSLY STATED HEREIN, MANUFACTURER MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY AND EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.**

### Inherent Risks of Use

The directions for use of this product are believed to be adequate and must be carefully followed. It is impossible to

eliminate all risks associated with use of this product. Lack of performance or other unintended consequences may result because of such factors as use of the product contrary to label instructions, abnormal conditions, the presence of other materials, climatic conditions or the manner of use/application, all of which are beyond the control of the Manufacturer. The buyer/user assumes all such risks.

#### **Limitation of Remedies**

The sole and exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability or other legal theories) shall be limited to, at Manufacturer's election, one of the following:

1. Refund of purchase price paid by buyer or user for product bought, or
2. Replacement of amount of product used.

Manufacturer shall not be liable for losses or damages resulting from handling or use of this product unless

Manufacturer is promptly notified of such loss or damage in writing; and **IN NO CASE SHALL MANUFACTURER BE LIABLE FOR DIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES OR LOSSES, INCLUDING WITHOUT LIMIT, HEALTH RELATED DAMAGES OR INJURIES.**

The terms of this **Warranty Disclaimer** and **Limitation of Remedies** cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Manufacturer or the seller is authorized to vary or exceed the terms of this **Warranty Disclaimer** or **Limitation of Remedies** in any manner.

It is not intended that this product be used to practice any applicable patent, whether mentioned or not, without procurement of a license, if necessary, from the owner, following investigation by the user.



#### **Nisus Corporation**

100 Nisus Drive • Rockford, TN 37853  
800-264-0870

PoolProof, Hexaborate Water Harmonizer and Nisus are all trademarks or registered trademarks of Nisus Corporation.  
©2009 Nisus Corporation #PP-SL-0710a

## MATERIAL SAFETY DATA SHEET

# POOLPROOF®

## Hexaborate Water Harmonizer®

Health Emergencies: CHEMTREC® (800) 424-9300

### SECTION I - PRODUCT & COMPANY IDENTIFICATION

Manufacturer: Nisus Corporation  
100 Nisus Drive  
Rockford, TN 37853  
(800) 266-0870

Product Trade Name: **POOLPROOF®**  
Chemical Family: Aqueous borate solution. Water with sodium borate to form concentrate  
Formula: Proprietary Mixture CAS No.: 1280-03-4

### SECTION II - COMPOSITION

Low pH disodium octaborate tetrahydrate in water  
Contains free water, water of crystallization and borates as dissolved solids  
Equivalent boron content of:  
83.6 % as sodium tetraborate decahydrate  
30.9 % as Boric oxide (B<sub>2</sub>O<sub>3</sub>)  
9.6 % B as Elemental Boron (B)

### SECTION III - HAZARDS

Hazard Rating: NFPA	Health	1	Slight hazard
	Flammability	0	
	Reactivity	0	

**EYE CONTACT:** Causes no significant eye irritation. Direct contact may cause tearing and redness in sensitive individuals.

**SKIN CONTACT:** This material non-irritating. Prolonged or repeated exposure to this material may cause drying of the skin. Persons with preexisting skin disorders may be more susceptible to the effects of this material. Not absorbed through skin.

**INGESTION:** Ingestion of large amounts may cause nausea, mental sluggishness followed by difficulty in breathing and heart failure, kidney and brain damage, possibly death. Small quantities ingested accidentally e.g. a tea spoon, will not cause harm.

**INHALATION:** Not an inhalation hazard.

### SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

**INHALATION:** Not an inhalation hazard.

**SKIN CONTACT:** Take off contaminated clothing. Rinse skin with water.

**EYE CONTACT:** Rinse with water or eye wash. Remove contact lenses, if present, after rinsing, then continue rinsing eye. Call a poison control center or doctor for further treatment advice if needed. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. Whilst this product is unlikely to cause eye problems, most other pool chemicals used with this product or in the vicinity can cause permanent eye damage. SEEK EMERGENCY MEDICAL ATTENTION if eye irritation continues, and make sure you explain you have been working in the vicinity of a swimming pool and may have had hypochlorite or quaternary ammonium compound exposure.

**INGESTION:** SEEK EMERGENCY MEDICAL ATTENTION If the victim is drowsy or unconscious, place on the left side with the head down. Do not give anything by mouth. If victim is conscious and alert, vomiting should be induced for ingestion of more than 1 – 2 tablespoons for an adult, preferably with syrup of ipecac under direction from a physician or poison center. If syrup of ipecac is not available, vomiting can be induced by gently placing two fingers in back of throat. If large amounts are ingested, treat for borate toxicity. If possible, do not leave victim unattended.

**NOTE TO PHYSICIAN:** Treat for exposure to borates. Monitor electrolytes.

### SECTION V - FIRE AND EXPLOSION HAZARD DATA

**FLASH POINT** None – contains water and inorganic borate salts. Will turn to glass at 1000°C.

**FLAMMABLE LIMITS:** None – contains water and inorganic borate salts. Will turn to glass at 1000°C.

**EXTINGUISHING MEDIA:** CO<sub>2</sub>, dry powder or universal type foam suitable for plastic container.

**FIRE AND EXPLOSION HAZARDS:** This material will not ignite.

**FIRE FIGHTING PROCEDURES:** Avoid inhaling smoke from plastic container. The use of a SCBA is recommended for fire fighters. Water spray may be useful in minimizing vapors from plastic container and cooling containers exposed to heat and flame.

### SECTION VI - SPILL OR LEAK PROCEDURES

**PRECAUTIONS IN CASE OF RELEASE OR SPILL:** Absorb with liquid absorbent. Do not let large volumes of material or washwaters enter sewers or waterways. Where large release has occurred see ecological section.

### SECTION VI - HANDLING AND STORAGE

**HANDLING AND STORAGE PRECAUTIONS:** Store between 40°F and 90°F. Do not store in direct sunlight. Keep containers tightly closed.  
Store in areas not accessible to children and pets.

### SECTION VIII - SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION:** N/A

**VENTILATION:** N/A

**If aerosolized ACGIH:** 10 mg/m<sup>3</sup> (8 hr. TWA) ; **OSHA:** 15 mg/m<sup>3</sup> (total dust) (8 hr. TWA)

PoolProof is easily washed from eyes and skin.

**EYE PROTECTION:** Use of safety glasses, goggles or face shield is recommended as a standard procedure. Some pool chemicals are strong oxidizers or are corrosive to eyes. Physical harm can occur to eyes when working with pressurized liquids, pumps and moving equipment.

### SECTION IX - PHYSICAL DATA

**Appearance:** White opaque liquid

**Specific Gravity:** 1.2 g/ml

**% Volatile:** Water only

**Vapor Pressure:** Water

**Boiling Point:** Above 212° F

**Odor:** None

**% Solubility in Water:** 100%

**pH:** Neutral - 50% aqueous solution 6.9 – 8.0

### SECTION X - REACTIVITY DATA

**STABILITY:** Stable

**CONDITIONS TO AVOID:** None known.

**HAZARDOUS POLYMERIZATION:** Will not occur

**HAZARDOUS DECOMPOSITION PRODUCTS:** None from product (carbon monoxide, carbon dioxide and other from plastic container).

### SECTION XI - TOXICOLOGICAL INFORMATION

PoolProof is of very low acute mammalian toxicity.

**Acute oral LD<sub>50</sub>** - greater than 5000 mg/kg body weight (Sprague-Dawley male and female rats).

**Acute dermal LD<sub>50</sub>** - greater than 2000 mg/kg body weight (New Zealand Albino male and female rabbits).

**Acute inhalation** – Not an inhalation hazard, non volatile. Upon drying, dust can be treated as nuisance dust only.

None of the major constituents of this material have been identified as carcinogens or probable carcinogens by IARC or OSHA.

Borates have been shown to have some chronic toxicity in animals fed high doses over long periods, similar to that of alcohol, but this has not been found in humans.

**SECTION XII – ECOLOGICAL INFORMATION**

**General:** Boron (B) is the element of the salt in PoolProof which is used by convention to report borate product ecological effects. PoolProof contains 9.6% B by weight.

**Phytotoxicity:** Boron is an essential micronutrient for healthy growth of plants; however, it can be harmful to boron sensitive plants (e.g. grass and citrus) in high quantities.

**Algal Toxicity:** Green algae, *Scenedesmus subspicatus*

96-hr EC<sub>10</sub> = 24 mg B/L

**Invertebrate Toxicity:** Daphnids, *Daphnia magna straus*

24-hr EC<sub>50</sub>=242 mg B/L

Test substance: sodium tetraborate

**Fish Toxicity:**

Seawater:

Dab, *Limanda limanda*

96-hr LC<sub>50</sub> 74 MG B/LL

Freshwater:

Rainbow trout, *S. gairdneri* (embryo-larval stage)

24-day LC<sub>50</sub> = 88 mg B/L

32-day LC<sub>50</sub>) = 54 mg B/L

Goldfish, *Carassius auratus* (embryo-larval stage)

7-day LC<sub>50</sub> = 65 mg B/L

3-day LC<sub>50</sub> = 71 mg B/L

In the event of accidental environmental release, dilute with water.

PoolProof is rapidly diluted to natural background micronutrient levels of boron.

**SECTION XIII – DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** Unopened containers may be returned to Nisus corporation for reprocessing. Contact your State Environmental Control Agency or local authorities for proper disposal guidelines. Most sewage facilities will allow discharge to sewage of small volumes. Very large volume can retard sewage processing.

**SECTION XIV – TRANSPORTATION INFORMATION**

DOT Hazard Classification: Not Regulated

**SECTION XV – REGULATORY INFORMATION**

Chemical Family: borate solution, sodium borate salt solution

Hazard Rating: NFPA	Health	1	Slight hazard
	Flammability	0	
	Reactivity	0	

**SECTION XVI – OTHER INFORMATION**

*The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This information and product are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof.*



100 Nisus Drive • Rockford, TN 37853 • (800) 264-0870

PoolProof, Hexaborate Water Harmonizer and Nisus are all registered trademarks of Nisus Corporation.

©2009 Nisus Corporation • #PP-MSDS-1209a