

Borate Wood Preservatives

Armor-Guard®

Soluble Borate Powder

Armor Guard is a borate powder that is dissolved in water for use. Add *Armor-Guard* to water in pail or bucket, stir until the solution is clear and apply with a low pressure sprayer. *Armor-Guard* protects un-infested wood from wood decay and wood destroying insects.

Like all borate treatments, exterior surfaces should be protected with one of our *Lifeline* exterior finish systems. *Armor-Guard* stays near the surface and we recommend that it be reapplied if the finish system is physically or chemically removed.



Surface Preparation:
Must be applied to clean and dry bare wood.

Application Rates:
Approx. 200 sq.ft. per gallon of mixed solution. A 17 lb. pail covers approx. 3400 sq.ft.

Application Temperature:
40° F to 90° F

Application Methods:
Low pressure sprayer. Drill and inject.

of Coats:
1 coat application. Mix 1 pound (4 cups or 2 of the enclosed scoops) of powder with one gallon water for use.

Drying Time:
1 to 3 days.

Clean up:
Soap and water.

Packaging:
1 lb. bag.
17 lb. pail.

Storage/Shelf Life:
Keep dry.
5 years.

Shell-Guard® Concentrate

Borate Wood Preservative Concentrate

Shell-Guard Concentrate is a combination of glycols and borate that must be mixed an equal volume of water for use. The diluted solution is applied to bare wood and impregnates the wood fibers with the active borate ingredient eliminating and providing protection against wood decay fungi and wood consuming insects.

Like all borate-based wood preservatives the diluted *Shell-Guard* solution must be applied to unfinished bare wood. One application of diluted *Shell-Guard Concentrate* is permanent when exterior wood surfaces remain protected with one of our *Lifeline* exterior finish systems.

Surface Preparation:
Must be applied to clean and dry bare wood.

Application Rates:
1 gallon of diluted solution to 108 sq.ft. of wood surface area.
1 gallon of concentrate covers 215 sq.ft. of wood surface.

Application Temperature:
40° F to 90° F

Application Methods:
Low pressure sprayer. Drill and inject.

of Coats:
1 coat application.
Mix 1:1 with water for use.

Drying Time:
2 to 3 weeks. Wash surface with *Log Wash* before applying finish.

Clean up:
Soap and water.

Packaging:
1 gallon container.
2.5 gallon container.
5 gallon carton.

Storage/Shelf Life:
Freeze/thaw stable.
5 years.



Cobra™ Rods

Cobra Rods are a way to spot treat decay prone areas such as log ends that are already coated with a finish. Once inserted into damp or wet wood the borate/copper complex in Cobra Rods dissolves spreading the active ingredients into areas surrounding the rod. This eliminates active decay fungi and helps prevent rot for 8 to 10 years.



Cobra Rods are 7/16" in diameter and two inches long. A 1/2" diameter drill bit is used for installation. The installation holes may be plugged with the accompanying plastic plugs and hidden with Energy Seal. A typical six to eight inch round log end will require two 2" long Cobra Rods inserted within 4 inches of the butt end.

Cobra™ Rods are a trademark of Genics Inc., Canada

Washington 1-800-548-1231; Tennessee 1-800-548-3554; Montana 1-800-479-7090;
Minnesota 1-877-244-6548; Colorado 1-800-433-8781







www.permachink.com

**PERMA-CHINK
SYSTEMS, INC.**



Termiticide, Insecticide
and Fungicide Concentrate

For the **PROTECTION** and **PREVENTATIVE TREATMENT** of WOOD AGAINST **TERMITES, CARPENTER ANTS, WOOD DESTROYING BEETLES** and **WOOD DECAY FUNGI**, and for **REMEDIAL CONTROL** of such **PESTS** in **INFESTED WOOD** or **WOOD FOAM COMPOSITES**.

-  Use on above ground wood surfaces including logs, timbers, dimensional lumber, decks, siding, wood-foam composites, etc.
-  For **REMEDIAL TREATMENT** of wood destroying organisms.
-  For **PREVENTATIVE TREATMENT** of wood in existing structures.
-  For **PRE-TREATMENT** of wood during construction.
-  Non-staining, no unpleasant odor.
-  Simply mix with equal part warm water for application.

ACTIVE INGREDIENT:

Disodium Octaborate Tetrahydrate25.31% by weight
(Na₂B₈O₁₃ · 4H₂O)

OTHER INGREDIENTS:.....74.69 % by weight

TOTAL.....100.00 % by weight

EPA Reg. No. 59905-6

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed. Avoid contact with eyes. Wash thoroughly after handling. Avoid contamination of food and feed. Do not leave container where children or animals may gain access. Avoid inhalation of spray mist.

ENVIRONMENTAL HAZARDS

SHELL-GUARD solutions carelessly spilled or applied to cropland or growing plants, including trees and shrubs, may kill or seriously retard plant growth. Do not contaminate water when disposing of equipment wash-waters. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

FIRST AID

IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to by a poison control center or doctor. • Do not give anything to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • 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 advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
<p>Have the product 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.</p>	

See back page for Directions for Use.

Manufactured by:



www.permachink.com

1605 Prosser Road, Knoxville, TN 37914

1-800-548-3554

GENERAL INFORMATION

SHELL-GUARD is water-soluble inorganic borate salt containing compound with insecticidal, termiticidal and fungicidal properties.

DIRECTIONS FOR USE

It is violation of federal law to use this product in a manner inconsistent with its labeling.

SURFACE PREPARATION

Wood must be clean and bare: free of dirt, wax and surface finishes. Remove all previous coatings or sealants. Remove mold and mildew prior to applying SHELL-GUARD. Do not apply to frozen wood. Surface temperature must be between 40°F and 90°F.

PREPARATION OF TREATMENT SOLUTION

An aqueous solution is used for treatment. To prepare solution stir an equal amount by volume of SHELL-GUARD into warm clean water. Stir or agitate while adding until SHELL-GUARD is completely dissolved in the water. Use mixture within 24 hours as settling of concentrate may occur. Mix in separate container; do not mix in spray applicator.

REMEDIAL AND PREVENTATIVE TREATMENT

For remedial and preventative control of organisms attacking wood, apply the diluted solution of SHELL-GUARD by brush, spray or dipping until surface is thoroughly wet (one gallon per 108 sq.ft.). Thoroughly soak cut ends. Application may also be made by drilling and then injecting the solution under pressure into sound wood until run-off is observed from entry/exit holes of infested wood. Treatment methods as described yields an approximate retention level of .24lbs per cubic ft. boric acid equivalent (BAE) in the outer 3/4" of the wood. To minimize borate leaching, apply a water resistant sealer AFTER THE SURFACE IS DRY TO THE TOUCH - in low temperature and high humidity locations this may take 1-4 weeks.

CLEAN UP

Clean up tools and equipment with water. Rinse well and allow to dry.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage: Do not freeze. Do not store where children or animals may gain access.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

NOTICE

Because of many varying conditions affecting use and application, manufacturer warns buyer that these may impair or vary the results or effects of the use of this product. In any event, complete prevention of decay by fungi or other organisms is not guaranteed. Neither manufacturer nor seller shall be liable in respect to any injury or damages suffered by reason of the use of this product for a purpose not indicated by the label, or when used contrary to the directions or instructions hereon, nor with respect to breach of any warranty not expressly specified herein.

Buyer accepts this material subject to these terms, and assumes all risk of usage and handling except when used or handled in accordance with this label. There are no expressed or implied warranties of merchantability or fitness for any particular purpose, except as specifically stated herein. Manufacturer shall not be liable for any consequential damages based on the use of the product.

Seller makes no warranty expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use and/or handling is contrary to label instructions.

Manufactured by:

**Perma-Chink Systems, Inc.
Knoxville, TN**

Material Safety Data Sheet



IDENTITY (As Used on Label and List)

SHELLGUARD

Section I

Manufacturer's Name Perma-Chink Systems, Inc.	Emergency Telephone Number: CHEMTREC 1-800-424-9300
Address (Number, Street, City, State, and ZIP code) 1605 Prosser Road Knoxville, TN 37914	Telephone Number for Information: 865-524-7343 Date of Preparation 8/17/09
Preparer's Name Sean Gahan	Signature of Preparer (optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Component (Specific Chemical Identity, Common Name(s))	CAS #	OSHA / PEL	ACGIH TLV	Other Limit Recommended	% (optional)
Propylene Glycol	57-55-6	N/A	N/A		30-50
Polyethylene Glycol	25322-68-3	N/A	N/A		30-50
Disodium Octaborate Tetrahydrate	12280-03-4	5 mg/m ³ (respirable dust) 15 mg/m ³ (total dust)	10 mg/m ³		20-30

Section III – Physical/Chemical Characteristics

Boiling Point: > 369°F	Specific Gravity (H ₂ O = 1) 1.1 – 1.3
Vapor Pressure (mm Hg.) 125 mm Hg @ 100°F	Melting Point % Volatile (Volume > 1%)
Vapor Density (Air = 1) > 1	Evaporation Rate (Butyl Acetate = 1) < 1
Solubility in Water Miscible in water, alcohol, acetone, some glycol ethers; insoluble in petroleum hydrocarbons.	
Appearance and Odor Clear, odorless liquid	

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) Non-flammable	Flammable Limitations Non-Flammable	LEL	UEL
Extinguishing Media Non-Flammable			
Special Fire Fighting Procedures Non-Flammable	NFPA Rating: Health = 1, Flammability = 1, Reactivity = 0		
Unusual Fire and Explosion Hazards Non-Flammable.			

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	✓	Avoid extreme heat
Incompatibility (Materials to Avoid) None known			
Hazardous Decomposition or Byproducts	None known		
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	✓	None Known

Section VI – Health Hazard Data

Routes of Entry Inhalation? N/A Skin? N/A Ingestion? Yes Eye Contact? Yes

Health Hazards (Acute and Chronic)

Eye contact: May cause redness or irritation. Skin Contact: N/A

Ingestion: May cause gastrointestinal distress. Inhalation: N/A

Carcinogenicity? NO

NTP? NO

IARC Monographs? NO

OSHA Regulated? NO

No adverse long term effects are known.

Signs and Symptoms of Exposure:

Medical Conditions: Generally aggravated by exposure. No adverse long term effects are known.

Emergency and First Aid Procedures:

Eye contact: Flush eyes immediately with clean water for at least 15 minutes. If irritation persists, seek medical attention.

Ingestion: If irritation persists, seek medical attention.

Skin contact: N/A

Inhalation: N/A

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled

Soak up spill with absorbent material.

Waste Disposal Method

Dispose of material in accordance with all applicable Federal, State, and Local regulations.

Precautions to be taken in Handling and Storing

Store in original container. Keep lid tightly closed. Do not reuse container for other purposes. KEEP OUT OF REACH OF CHILDREN.

Other Precautions

Read and observe all precautions on product label.

Section VIII – Control Measures

Respiratory Protection (Specify Type)

None required for normal use.

Ventilation

Local Exhaust

None normally required.

Special

Mechanical (general)

Other

Protective Gloves

None required for normal use

Eye Protection

Safety glasses or Goggles.

Other Protective Clothing or Equipment

None required for normal use

Work/Hygenic Practices

The information contained herein is, to the best of Perma-Chink Systems, Inc. knowledge, accurate as of the data indicated. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar, and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume responsibility for the results of its use. This information is furnished on the condition that the person receiving it shall make his own determination as to the suitability of the material for his particular purpose and on the condition that he assumes the risk of his use thereof.