

PH 3: 61-29-1  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF PESTICIDES PROGRAMS  
REGISTRATION DIVISION (75-767)  
WASHINGTON, DC 20460

EPA REGISTRATION NO.  
67599-1

DATE OF ISSUANCE  
APR 26 1995

NOTICE OF PESTICIDE:  REGISTRATION  
 REREГИSTRATION  
(Under the Federal Insecticide, Fungicide  
and Rodenticide Act, as amended)

TERM OF ISSUANCE

NAME OF PESTICIDE PRODUCT  
PermaShield Marine  
Coating

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

American Marine Coatings, Inc.   
2040 Westlake Avenue North  
Suite 300  
Seattle, WA 98109

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the labeling changes listed below before you release the product for shipment:

- a. Add the phrase "EPA Registration No. 67599-1".
- b. Include the heading "Manufactured by" immediately above the company name and address.
- c. Include your complete EPA Establishment No. (i.e., company # - State abbreviation - site #) on the label.
- d. Place the statement "Mix Component A and Component B (inside container) before using" immediately above the heading "Part A".

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

- e. Include a Net Contents statement on your label similar to the following:

Net Contents

Part A: 4.5 gallons  
(Lower Container)

Part B: 0.5 gallons  
(Upper Compartment Inside)

- f. Place the heading "Directions For Use" and the statement "It is a violation of Federal Law to use this product in a manner inconsistent with its labeling." immediately above the caption "Mixing & Application".
- g. In addition to your company name, also include your company address on the label.
- h. Revise your storage and disposal statement to read as follows:

STORAGE AND DISPOSAL

Do not contaminate water, food, feed by storage or disposal. Open dumping is prohibited.

PESTICIDE DISPOSAL

Paint that cannot be used according to label instructions must be disposed of according to federal, state or local procedures under the Resources Conservation and Recovery Act.

CONTAINER DISPOSAL

Dispose of container by triple rinse and recycling or puncturing and disposing in a sanitary landfill or by other approved State and local procedures. If burned stay out of smoke.

The heading "STORAGE AND DISPOSAL" must be of the same type size as the child hazard warning statement.

- i. Revise the "If Swallowed" statement to read "If swallowed, drink promptly a large quantity of water. Avoid Alcohol. Get medical attention."
- j. As the five gallon container has a separate Part B container within, change the statement "Part A", on the front panel to read:

Part A  
(Lower Compartment)

Create a separate section next to the front panel Part A box which reads:

Part B  
(Upper Compartment)

Inert Ingredients.....100.0%

- k. For your one gallon size product which will be marketed in two separate containers, submit five copies of labeling revised in accordance with the above instructions, but delete the Part B statement from the Part A label, and delete the Part A statement from the Part B label. Please note that the Part B label for the one gallon size product must be attached to the Part B container contained inside the five gallon product.

3. Contact William Wooge (308-8794) of EPA's Special Review and Reregistration Division (SRRD) to determine what reregistration data requirements apply for Copper (Case #4025) currently in effect and how to comply with them. SRRD will be informed that a registration has been issued for your product, and that it should be added to their database for this chemical case.

4. Submit a complete chemistry data package for the source of your copper material. Refer to 40 Code of Federal Regulations part 158 for applicable data requirements. This data should be submitted within six months of the date of this letter.

5. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely,

Marion Johnson  
Product Manager (31)  
Antimicrobial Program Branch  
Registration Division (7505C)

ACCEPTED  
 With COMMENTS  
 In EPA Letter dated  
 APR 26 1995  
 This is the only...  
 approved for the...  
 67599-1

# PermaShield

## MARINE COATING

PermaShield — A water resistant, epoxy barrier coating for protection below the water line.

U.S. Patent No# 5,284,682

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING:** Causes eye irritation. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing. Wear protective clothing such as gloves, long-sleeved cotton shirt, long pants and hat. May be fatal if swallowed or inhaled. Do not breathe dust, vapor or spray mist. Wash contaminated clothing before reuse. Never give anything by mouth to an unconscious person. Call a physician immediately. Avoid storage and usage near food and feed products. When used in confined areas or while spraying and/or sanding boat surface, wear a mask or a respirator, jointly approved by the Mining Enforcement and Health, under the provisions of 30 CFR 11. Skin and eye irritation may occur on exposure. Use protective clothing during washdown and/or application on marine vessels. For use on commercial and/or noncommercial (pleasure crafts) marine vessels.

**ENVIRONMENTAL HAZARDS:**

Do not contaminate waters by cleaning or equipment or disposal of wastes. Do not allow chips and dust generated during paint removal to enter waters. Dispose wastes debris in an approved landfill.

**Physical or Chemical Hazards**

**FLAMMABLE. FLASH POINT APPROXIMATELY 80° F or 26°C**  
 Keep away from heat and open flame.

Residue, sludge or use solution that cannot be used according to label instructions must be disposed of according to Federal or OCL procedures under Subtitle C of the Resources Conservation and Recovery Act.

**FLAMMABLE LIQUID UN 1263**

**PART A**

11.87 LBS.	5.40 KILOS
0.52 GALLONS	1.97 LITERS

ACTIVE INGREDIENTS		
COPPER METAL	68.9	% WT.
INERT INGREDIENTS	31.1	% WT.
TOTAL	100.00	% WT. 100.00

CONTAINS PETROLEUM DISTILLATES

**WARNING:**

**KEEP OUT OF REACH OF CHILDREN**

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS  
 EPA ESTABLISHMENT NO. WAD0006

**BEST COPY AVAILABLE**

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LANT

mplete

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

APR 26 1995

Under the Federal Insecticide,  
Fungicide, and Herbicide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
67599-1

**FOLLOW ALL SAFETY AND HEALTH**

**REGULATIONS: PRACTICAL TREATMENT IF SWALLOWED:** Drink promptly a large quantity of milk, egg whites, gelatin solution or if these are not available, drink large quantities of water. Avoid alcohol. Get medical attention

**IF IN EYES:** Flush with plenty of water. Get medical attention.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention

**WARRANTY:** American Marine Coatings, Inc. warrants that the contents of this container conform to the product's description on this label

**THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT SHALL AMERICAN MARINE COATINGS BE LIABLE FOR ANY INCIDENTAL SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER INCLUDING WITHOUT LIMITATIONS LOSS OF USE OR LOST PROFITS.**  
This product may not conform to the implied warranties of the uniform commercial code

**STORAGE AND DISPOSAL:** Do not contaminate water, food, feed by storage or disposal. Open dumping is prohibited

**PESTICIDE DISPOSAL:** Pail that cannot be used according to label instructions must be disposed of according to Federal, State or local procedures under the Resources Conservation and Recovery Act

Mix entire contents of parts A and B.  
PermaShield™ Marine Coating has a two hour pot life at 70° F.  
Working temperature range is 45°F to 85°F (7° C to 30° C).

PermaShield Marine Coating must be applied by trained applicators with approved equipment.  
See PermaShield marine AF. manual.

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

**Caution**

**Notice:** Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

To avoid breathing vapors or spray mist, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness increase fresh air or wear respirator protection (NIOSH/MSHA TC 23C or equivalent). Follow respirator manufacturer's directions for respirator use

**Warning:** Detectable amounts of chemicals or substances known to the State of California to cause cancer, birth defects or other reproductive harm may be found in chemical products, petroleum products and their vapors. Follow applicable directions and use care when handling chemical and petroleum products. (California Health and Safety Code, Section 25249.6.)

**First Aid:** In case of eye contact flush immediately with plenty of water. If affected by inhalation of vapor or mist, remove to fresh air. Consult a physician immediately

Keep container closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with applicable local, state and federal regulations. Harmful or fatal if swallowed. May be absorbed through skin or cause skin irritation. Follow all safety and health precautions established by local, state and federal agencies

**Do not store or use near heat or open flame  
Vapor may be harmful**



American Marine Coatings, Inc. • Seattle, WA

**BEST COPY AVAILABLE**

10/15/95

67599-1

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# AMERICAN MARINE COATINGS, INC.

1445 N. Northlake Way

Seattle, WA 98103

Phone: (206) 633-3308 Fax: (206) 633-3384

## MANUAL

### BOAT PREPARATION: VESSEL SET UP

If possible, position the hull so that it's bottom is completely free of supporting blocks. Set the boat down on her keel or skeg and fasten support legs to the top sides or gunwales. If the boat can be positioned in this manner, the whole bottom is available to the spray-gun in one pass.

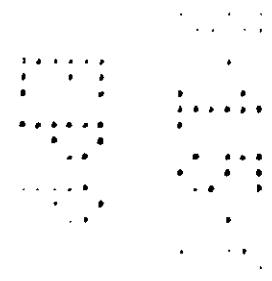
Should it be necessary to set her down on support stanchions that have pads against her bottom, it will be necessary to move the stanchions after the coating has cured for 24 hours and spray those areas. Also, when bumping the boat don't forget the keel pads.

When positioning a motor yacht, set her keel on blocks that are taller than normal - at least 30 inches off the ground - as this distance is necessary for the spray gun to apply a proper pattern to the bottom of the skeg, or keel and give the applicator enough room to move about freely under the vessel.

## NEW BOAT - FIBERGLASS

When a new boat arrives at the yard fresh from dealership or factory, the mold release wax must be removed down to the gel-coat. Some mold release compounds are water soluble and others are not. If you are not sure which type is on the hull, first wash with a strong solution of T.S.P. (tri-sodium phosphate) and fresh water. Rinse thoroughly. After drying, do a complete wipe down with a wax stripper. Any wax left on the hull will prevent proper bonding and separation will occur after curing where any wax remains.

Next - tape off the waterline stripe, and lightly sand the gel-coat using a dual action sander with 100 or 120 grit sandpaper. "lightly sanded" means cover the hull completely and carefully but only deep enough to roughen the surface of the gel-coat. Care must be taken on some boats as those manufactures will void their gel-coat warrantee because of sanding. Should this be the case it is essential that all wax and wax residue be removed from the hull. After wiping down the hull with rags Apply one coat of strontium primer to all metal surfaces to be coated with PermaShield™. One coat of PermaTack sealer is to be rolled on which will penetrate into the gel-coat and give the final coating a solid base to adhere to. Coat the Strontium surfaces as well. Wait a minimum of 4 hours, than spray on PermaShield™. If the final coating is applied within 36 hours of the sealer application, no further preparation is necessary. If timing is over 36 hours then the sealer will need a light sanding to roughen that surface.





## USED FIBERGLASS BOATS

Tape off the water line and strip off all of the bottom paint down to the gel-coat. Carefully check the hull for blisters and measure the moisture content . If there are no blisters and the moisture content is not more than 7%, depending on your geographical location, lightly sand the gel-coat using a dual action sander and 100 grit sandpaper to roughen the surface. remove the excess dust and wipe down the hull with clean rags. Prime all under water metal surfaces with strontium primer, do not coat the props or shafts.

) Be absolutely sure that no waxing is being done in the near vicinity of the boat you are working on. Air born wax can contaminate your hull and effect the adhesion of the epoxy coatings.

) Proceed to roll on PermaTack sealer and spray coating as with a new hull after wiping all dust from the hull. However, if blisters are found, they must be repaired before any further preparation is undertaken. Should this not be done, moisture will be locked in to an overly damp hull which will cause separation and other problems at a later date. This will also void the warranty. Once everything is in order proceed to sand, wipe, seal and spray as above. Also, remember that if sealant and spraying don't happen within 36 hours, sealant must be sanded as well.

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## WOOD HULL BOATS

On wood hull boats, apply to American Marine Coatings.

## STEEL HULL VESSELS

Steel hulls need to be completely sand-blasted to remove all rust and contaminants and obtain surface profile to SSPC-SP-10. Mark the hull where the water-line is. After the hull has been taken down to near white metal it must be blown clean. All sand and hull waste must be collected and discarded in accordance with local, State and Federal regulations. Apply two coats of PermaShield Primer to a thickness of 8 to 10 mils total, allowing 4 hours between coats. On steel hulls that have a coating of epoxy primer and antifoulant paint, remove all traces of the antifoulant paint and lightly abrade the surface of the epoxy primer. Spot prime bare areas with an epoxy primer at recommended mil thickness. Apply one coat of PermaTack (4 - 6 mils). Within 36 hours spray on PermaShield™ to a thickness of 25 to 30 mils. Allow 36 hours to cure.

Note: PermaShield™ must only be applied by American Marine Coatings (trained) Personnel.

## PREPARATION PRIOR TO SPRAYING PERMASHIELD

After the hull has been wiped down and free of dust, tape off the water-line and over spray area with 3M plastic film, 24" or wider, taped to the hull to control over-spray. Cover the prop shaft and prop with 3M plastic film as well. Tape over the knot meter wheel and depth sounder transducer. Wad up some 3M film and plug the through hull by pushing the wadding up inside the opening. (care must taken to remove this wadding prior to launch) Do not cover the shaft struts, rudders or lifting plates attached to the transom. Be sure the hydraulic rams are in the up position before coating with PermaShield™, which must be applied within 36 hours or sealant must be lightly sanded to insure bonding.

The stem (bow area), waterline, keel and prop wash areas should receive additional coverage to a full 30 mils either as you go along or after the whole hull is done. These areas receive most wear and abrasion.

After the coating has cured for 24 hours the stanchions and keel blocks must be moved to allow treatment. Sand, wipe and roll or brush on a coat of sealant - allow Sufficient time for the tack coat to set (tacky to the touch) and spray on the PermaShield to the proper thickness.

11/24/10

## PREPARATION OF SPRAY EQUIPMENT PRIOR TO SPRAYING

Every component of the A.M.C. spray system is specially designed and selected to apply our products and must be dedicated to its' exclusive use. The proprietary formulas and the patented application system is the reason we are able to guarantee and warrant our products.

The delivery system is divided into four sections. On the top is the air motor section. For every pound of compressed air in the air motor, the fluid pump generates 50 pounds of fluid pressure.

The air motor drives a shaft into the fluid pump. Connected to the shaft are a series of seals and fluid valves. Between the air motor and fluid pump is a lubricating cup that lubricates the primary seals just below. Keep approximately 2 oz of PermaShield™ reducer in the cup during spraying. The reducer will keep the shaft clean while keeping the seals moist from above.

Attached to the back of the cart are the compressed air regulating controls. These controls regulate atomizing air, pump elevator and fluid (spraying) pressure. The pump elevator lifts and lowers the pump and ram plate assembly. To operate the air pump efficiently requires 80 psi at 15 cfm. (approximately the compressed air output of an industrial or commercial duty 5 hp. air compressor).

On the air delivery system there are three sets of valves. On the left is the two-way handle that controls the elevator system. In the center is the control for the air pressure to the spray gun (atomizing). On the right is the control (red) that controls the fluid pressure to the spray gun.

Lift the system up to the desired height and place a 5 gallon metal vertical sided can under the ram plate (pail seal). Lower the unit

slowly while aligning the bucket to the seal so the plate enters equally on all sides.

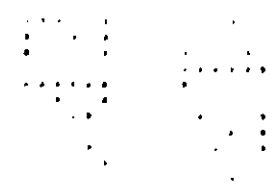
Remove the bleed valve to allow material to bleed the trapped air from the center of the plate. Insert the bleed valve after material starts to exit the hole.

Slowly adjust the fluid pressure to prime the fluid pump with material and to charge the fluid hose. With the trigger held open on the gun, raise the fluid pressure until a constant stream exits the gun. Release the trigger and bring the fluid pressure gauge to approximately 80 psi. The required fluid pressure will depend on the ambient air temperature. Colder ambient temperatures require higher fluid pressure.

Adjust the air pressure to the gun to approximately 65 psi. On a practice surface, engage the gun and adjust the pattern with the air and fluid valve controls.

Lower the ram plate into the pail (the handle will stay down) with approximately 15 to 20 lbs of air pressure.

When the ram plate reaches the bottom of the pail and the pump dry fires (cavitates), its time to refill. Turn the fluid and air valves to the gun to 0 pressure. Raise the elevator, take the air line from the air pump top fitting and place it on the fitting at the center of the ram plate. Adjust the air pressure slowly. This puts positive air pressure between the ram plate and the bottom of the pail - separating the two.



10/10

## PRIMING THE SYSTEM

After assembling the gun and connecting the hoses, place a clean bucket of solvent under the fluid pump. Hold the gun above the solvent bucket (without the spray tip). Lower the fluid pump into the solvent and engage the air slowly to the air motor. Allow the system to free/flow prime itself for approximately 60 seconds.

Back off the air to stop the pumping action. This will stop the fluid from exiting the gun. Do not prime the system with PERMASHIELD™ until you are ready to commence spraying.

For additional information refer to your Kremlin Manual.

## YOU ARE NOW READY TO MIX AND SPRAY MATERIAL

The recommended 'material' temperature range for spraying Permashield™ is between 45 and 85 degrees. If the temperature falls outside this range, the material must be heated or cooled. Operating within this range is totally acceptable, the optimum range being between 65 and 75 degrees F.

Open the 5 gallon can of PermaShield™. Each kit consists of 4 gallons of PermaShield™. The false insert on top contains the hardener. Add 100% of the hardener to the copper material below. It is very important that all the material is mixed very thoroughly. Take your time and mix well to avoid any dry pockets. Dry powder will find its way to the gun and clog it.

Place the material under the pump and submerge the pump while slowly engaging the fluid pressure valve. As you will still have cleaning solvent in the hose, adjust the pressure slowly and drain the solvent back into its' container. When all has exited, screw on the aircap and tip assembly and open the air pressure valve to the air hose. This air controls the atomization of the fluid exiting the gun, adjust to approximately 60 psi. You are now ready to apply material to the surface. PermaShield™ will cover about 110 square feet per gallon at 25 to 30 mils based on practical application.

Should the gun start to lose its' fluid pressure (flow) this means that the line filter may be starting to clog. Shut the system down by turning off the fluid and air pressure at the pump. Remove the filter and clean or replace them. Start back up and continue spraying. Generally, after the fifth gallon sprayed, the filter will need to be pulled and cleaned or replaced.

### EQUIPMENT CLEANING AND MAINTENANCE

On completion of the spraying, the spray equipment must be thoroughly cleaned. Because of the nature of the epoxy to harden

even after it has been thinned by cleaning solvent, any epoxy residue left in the pump, hose or gun will harden after the solvent has evaporated potentially rendering the equipment inoperable. Begin by removing the gun and filter.

Put the tips and retainer ring in the pail as well. Pour 3/4 gal. epoxy reducer in a pail and place it under the fluid pump and put the gun end of the fluid hose into the pail. Engage the pump and solvent will be drawn through the pump into the hose and back into the bucket. Flush twice using fresh solvent each time.

) Remove the fluid control valve from the front of the gun. Pay close attention to the fluid entrance tube, fluid control rod and tip spring assembly, inspect and clean. Blow out all residue with the air hose.

Remove the old solvent from under the pump and replace with a clean gallon of solvent. Place the end of the fluid hose in the used solvent and flush the system until clean solvent exits the hose. Unscrew the fluid pump sleeve from the shaft. Unscrew the 17 mm. nut from the end of the shaft. Slide the sleeve down and off the shaft.

) Clean the valves and seals and reassemble. Disconnect the fluid hose and blow out all remaining residue from the hose coil and put away. Wipe down the entire assembly prior to storage.

All cleaning solvents and residue should be treated as hazardous waste and disposed of accordingly.