

RESTRICTED USE PESTICIDE

Application Instructions

Amercoat 698HS is a high-solids, controlled polishing, broad spectrum antifouling which gives long term protection against hard and soft fouling of primed steel, wood and concrete surfaces.

Strict adherence to all application instructions, precautions, conditions and limitations is necessary to obtain maximum performance. For conditions outside the requirements or limitations described, contact your Ameron representative.

Surface Preparation

Coating performance, in general, is proportional to the degree of surface preparation.

Depending upon condition of hull and existing antifouling, surface cleaning will vary from high pressure water cleaning to abrasive blasting. After immersion service of Amercoat 698HS or Amercoat 698, high pressure water wash is required prior to topcoating with additional Amercoat 698HS.

Apply over suitable primer system or clean, intact, existing bottom system.

Steel - Prepare surface in accordance with instructions for anticorrosive coating to be used.

Cleaning After Service

Existing fouled surfaces - Remove fouling by scraping and/or sand sweeping. Loose paint should be removed by high-pressure water wash. Tightly adhering anticorrosive and antifouling coating may remain.

Non-fouled surfaces - High-pressure water wash.

Note: When applying Amercoat 698HS antifouling coating over epoxy or coal-tar epoxy anticorrosive coatings, apply first coat of antifouling while anticorrosive is still tacky or soft to fingernail. At temperatures above 50°F (10°C), the topcoat time will be between 4 and 8 hours. At temperatures below 50°F (10°C), the topcoat time will be within 48 hours. Failure to apply antifouling coating while anticorrosive is still tacky may result in poor adhesion between coatings and eventual delamination of antifouling from the anticorrosive.

Application Instructions

The following is a guide. Suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed to achieve proper spray characteristics.

Airless spray - Standard equipment, such as Graco Bulldog Hydra-Spray or larger, with a 0.019-inch fluid tip, 28:1 or high pump ratio.

Conventional spray - Industrial equipment such as DeVilbiss MBC spray gun with 765 air cap, "E" tip, 15 to 20 psi pot, 68 to 80 psi gun. A moisture and oil trap in the main air supply line and mechanical pot agitator are recommended. Separate air and fluid pressure regulators are recommended.

Environmental Conditions (during application, drying and curing)

Temperature - Air and surface: 0 to 120°F (-18 to 49°C). The surface temperature must be at least 5°F (3°C) above dew point to prevent condensation.

Drying and cure times (ASTM D1640) (hours)

	°F/°C				
	90/35	70/21	50/10	32/0	0/-18
recoat	1	2	4	8	24
immersion	8	16	24	48	96

Amercoat 698HS may air dry up to 2 months before immersion.

Application Procedure

1. Flush all equipment with Amercoat 12 or 65 before use.
2. Stir material thoroughly and keep stirring during application to insure pigment suspension.
3. Thinning is normally not required. If thinning is necessary for workability, thin with up to 1/2 pint Amercoat 65 or 101 per gallon of Amercoat 698HS.
4. Apply a wet coat in even, parallel passes, overlapping each pass 50 percent to avoid holidays, bare areas and pinholes. If required, cross-spray at right angles.
5. Observe drying and curing times for specific anticorrosive coating.
6. Clean equipment with Amercoat 12 immediately after use.

Amercoat 698HS - Danger! Corrosive. Contains xylene, tributyltin methacrylate copolymer, zinc oxide, cuprous oxide.

Precautionary Statements

Restricted Use Pesticide - Due to Toxicity of Aquatic Organisms including Shellfish: For sale only to certified commercial applicators and for use only by certified commercial applicators or by persons under the direct supervision of an on-site (at the work site) certified commercial applicator.

Hazards to Humans (and Domestic Animals)

Danger! Corrosive. Causes skin burns. Wear protective clothing such as gloves, long-sleeved cotton shirt, long pants and hat. Fatal if inhaled. Causes eye irritation. May be fatal if swallowed. Harmful if absorbed through skin. This product may be a dermal sensitizer. Do not get in eyes, on skin or clothing. Do not breath vapor; spray mist; dust or chips from sanding. Wear a mask or respirator jointly approved by the Mining Safety and Health Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling and before eating or smoking. Use with adequate ventilation.

Statement of Practical Treatment - If swallowed, drink promptly a large quantity water. Avoid alcohol. Get medical attention.

Note to Physician - Probable mucosal damage may contraindicate the use of gastric lavage. **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.

BEST AVAILABLE COPY



Directions for Use – It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. It is unlawful to use this product on non-aluminum hulled vessels less than 82 feet (25 meters) in length (on deck) except for the outboard motor or lower drive unit of such vessel. Users must comply with all applicable OSHA requirements.

Storage and Disposal – Keep container closed when not in use. Store in cool, dry, well-ventilated area. Do not contaminate water, food or feed by storage or disposal.

Pesticide Disposal: Paint chips, spent abrasive, and any other waste materials from removal of old paint must be disposed of in a sanitary landfill (or, if required by Federal State or local regulations, handled as a hazardous waste). If possible, use all of the contents by application according to label instructions. Manage excess paint, rinsate, and other application wastes in accordance with Federal, State, and local requirements.

Consult your State pesticide or Environmental control agency, nearest EPA Regional Office, or the RCRA/Superfund Hotline (800-424-9346) for waste disposal guidance.

Container Disposal: Triple rinse container if intended for recycling or reconditioning. Empty paint containers with small amounts of dried residue must be disposed of in a sanitary landfill (or, if required by Federal, State or local regulations, handled as a hazardous waste).

Improper use and handling of this product can be hazardous to health and cause fire or explosion. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect personnel against toxic hazards. This is especially true in confined spaces such as tank interiors. Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces.

If you do not fully understand these warnings and instructions or cannot strictly comply with them do not use the product.

Notice: This product is for industrial use only.

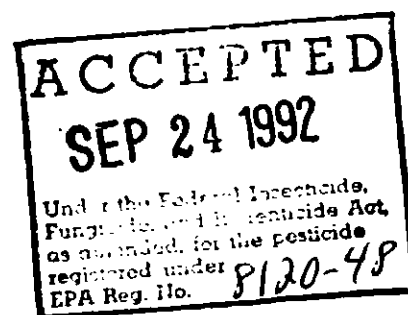
description on the label and is reasonably fit for the purposes referred to in the directions for use, subject to the inherent risks referred to below. Ameron makes no other warranty express or implied of fitness or merchantability or any other express or implied warranty.

If a product does not conform with this warranty, Buyer must notify Ameron within five days of discovery of the defect, but in no event later than one year after delivery date or the expiration of the applicable shelf life, whichever is shorter. Ameron's sole obligation under this warranty shall be at its option, to credit Buyer's account, or to supply replacement material or repair. Failure to notify Ameron of nonconforming goods under this warranty, within the time specified above, shall bar Buyer from recovery hereunder. In no case shall Ameron be liable for consequential, special, indirect, punitive or other damages resulting from the use or handling of this product. Ameron offers this product and Buyer accepts it, subject to the conditions of sale and warranty which may be varied only by a written agreement signed by a duly authorized representative of Ameron.

The directions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond Ameron's control. All such risks are assumed by Buyer.

Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. In no event shall Ameron be liable for consequential or incidental damages.



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Protective Coatings
Division

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RESTRICTED USE PESTICIDE

Product Data

- High-solids, minimally polishing, antifouling coating for use on vessels trading in all types of navigable waters
- Long-term protection against barnacles, algae, hydroids and other types of marine fouling
- Avoids excessive coating wear
- It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. It is unlawful to use this product on non-aluminum hulled vessels less than 82 feet (25 meters) in length (on deck) except for the outboard motor or lower drive unit of such vessels. Users must comply with all applicable OSHA requirements.

- Provides for hull roughness control

Amercoat 698HS is designed to release a constant amount of balanced toxicant to achieve control without excessive erosion. Hence, the environmental hazard potential is minimized along with material costs. Amercoat 698HS is equally effective whether the vessel is stationary or moving at full speed.

Roughness and Fuel Consumption - The Amercoat 698HS antifouling system is truly economical, minimizing drag and keeping it under control. Typical applications include the following:

1. The surface is initially prepared by sandblasting to remove old coating and corrosion and reduce profile to 75 to 100 microns. When the vessel is new, prepared surface roughness should be close to this value.
2. An Ameron-recommended anticorrosive system and 2 coats of Amercoat 698HS are applied. In most cases, this will reduce micro-roughness to the 20- to 25-micron range, approaching hydrodynamic smoothness.
3. For maintenance and repair, the existing coating having a roughness of 200 to 250 microns can be reduced to the range of 20 to 25 microns by using an Ameron-recommended tiecoat and 2 coats of Amercoat 698HS.
4. Because Amercoat 698HS is polishing, gross surface imperfections due to application will be reduced in service. Further, because Amercoat 698HS is hard relative to the usual polishing type coatings, major changes in surface micro-roughness will be minimal during its service life and it will not be subject to excessive damage and wear.

Ablation or Erosion - Because of its design, Amercoat 698HS does not depend on erosion to deliver toxicant or to achieve drag control. The measured erosion rate of Amercoat 698HS at 15 knots is less than 6 microns per month. This low polishing rate provides a mechanism for removal of physical imperfections, but does not sacrifice coating life.

High Solids - Amercoat 698HS is a new generation antifouling coating based on the most current polymer technology. The high-solids content of Amercoat 698HS provides improved economy in application costs, time and reduction in volume of coating used.

Application Data Summary

For complete information on drying times, procedures, environmental requirements, equipment and safety precautions, see Application Instructions. This product must be applied as recommended to obtain the maximum protection for which the coating is formulated.

Physical Data

Finish

Color

Components

Curing mechanism

Volume solids (ASTM D2697)

Dry film thickness

Coats

Theoretical coverage

1 mil (25 microns)

6 mils (150 microns)

VOC (EPA Method 24)

698HS

698HS thinned (1/2 pt/gal)

Flash point (SETA)

Amercoat 698HS

Amercoat 65

Amercoat 101

Amercoat 12

Application Data

Applied over

Surface preparation

Method

Environmental conditions

Temperature

air and surface

Surface temperature at least 5°F (3°C) above dew point to prevent condensation

Drying and cure times (ASTM D1640) (hours)

	°F/°C				
	90/35	70/21	50/10	32/0	0/-18
recoat	1	2	4	8	24
immersion	8	16	24	48	96

Thinner

Cleaner

Shipping Data

Packaging

Shipping weight (approx.)

1-gal unit

5-gal unit

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)

1 year from shipment date

Improper use and handling of this product can be hazardous to health and cause fire or explosion. Safety precautions with Application Instructions must be strictly followed during storage, handling, application and drying periods.

Numerical values are subject to normal manufacturing tolerances, colors and testing. Allow for application losses and surface irregularities.

SEP 24 1992

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under

Flat

Red, maroon, black, green, blue

1

Solvent release

54% ± 3%

6 mils (150 microns)

2

ft²/gal m²/L

866

144

3.1 lb/gal (372 g/L)

3.3 lb/gal (396 g/L)

°F

72

78

145

0

°C

22

25

63

-18

°F

0 to 120

-18 to 49

°F/°C

90/35

70/21

50/10

32/0

0/-18

1

2

4

8

24

8

16

24

48

96

Amercoat 65, 101

Thinner or Amercoat 12

1- and 5-gal container

lb

kg

16.9

7.7

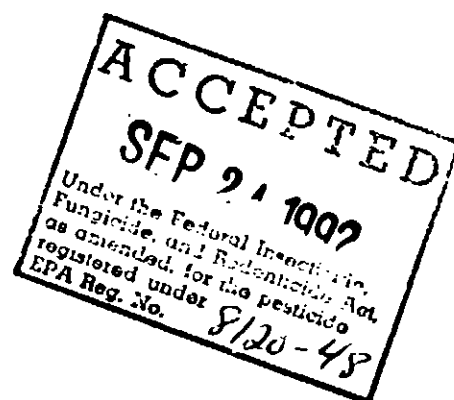
79.7

36.2

Ameron warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the direction of use, subject to the inherent risks referred to below. Ameron makes no other warranty express or implied of fitness or merchantability or any other express or implied warranty. If a product does not conform with this Warranty, Buyer must notify Ameron within five days of discovery of the defect, but in no event later than one year after delivery date or the expiration of the applicable shelf life, whichever is shorter. Ameron's sole obligation under this Warranty shall be at its option, to credit Buyer's account, or to supply replacement material or repair. Failure to notify Ameron of nonconforming goods under this Warranty, within the time specified above, shall bar Buyer from recovery hereunder. In no case shall Ameron be liable for consequential, special, indirect, punitive or other damages resulting from the use or handling of this product. Ameron offers this product and Buyer accepts it, subject to the conditions of sale and warranty which may be varied only by a written agreement signed by a duly authorized representative of Ameron.

Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. In no event shall Ameron be liable for consequential or incidental damages.



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