



Amercoat 339

Arctic Ice-Breaker Coating (formerly Amercoat 188)

Product Data/Application Instructions

- **100% solids coating**
- **High impact and abrasion resistance**
- **Excellent resistance to water, chemicals and solvents**
- **Provides a hard, smooth surface with a low coefficient of friction**
- **Standard airless application**

Typical Uses

Amercoat 339 is a solvent free high performance coating that can be applied with standard airless equipment. Its abrasion and impact resistance makes it an excellent coating for the ice-belt of vessels in arctic waters. Amercoat 339 is an excellent barrier coat, providing long-term resistance to corrosion even under aggressive conditions.

Typical Systems

The typical Arctic ice-breaker system consists of one coat Amercoat 238 at 10 mils followed by one coat Amercoat 339 at 10 mils.

Application Data Summary

To obtain the maximum performance for which this product is formulated, strict adherence to all application instructions, precautions, conditions and limitations is necessary. If conditions exist that are not within the requirements or limitations described, consult your Ameron representative.

Surface Preparation

Amercoat 238-Be sure Amercoat 238 is dried and cured in accordance with the application instructions of the product. Remove grease, oil, dust and other foreign matter. Allow surface to dry completely before applying. **IMPORTANT:** Apply Amercoat 339 as soon as possible after surface preparation to prevent recontamination.

Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be

Physical Data

Finish	High gloss	
Colour	Red, black	
Components	2	
Volume solids	100%	
VOC	0	
Substrate	Amercoat 238	
Curing mechanism	Chemical reaction between components	
Dry film thickness per coat	10 mils	(250 microns)
Calculated coverage	ft ² /gal	m ² /L
10 mil (250 microns)	160	4
Allow for application losses, surface irregularities, etc.		
Application methods	airless spray	
Pot life (at 20° C)	1 hour	
Drying times (at 20° C)		
Dry to recoat	14 hours	
Dry through	24 hours	

Pot life and drying times are dependent on temperature and quantities mixed.

Induction time	not applicable	
Mixing ratio (by volume)		
Resin	3 parts	
Cure	1 part	
Specific gravity	1.74 kg/L (mixed product)	
Thinner	Not recommended	
Cleaner	T-10 Thinner	
Flash points (Closed Cup)		
Resin	93° C	
Cure	101° C	
T-10 Thinner	25° C	
Packaging		
Resin	3 gallons in 5 gallon pail	
Cure	1 gallon in 1 gallon can	
Shipping Weight		
Resin	44 lbs	20 kg
Cure	10 lbs	4.5 kg
Shelf life when stored indoors at 40° to 100° F (4 to 38° C)	One year from shipment date used. Adjustments of pressure and change of tip size	

may be needed to obtain the proper spray characteristics.

AIRLESS SPRAY-Amercoat 339 is a solvent-free epoxy coating which is applied by a single (pump ratio 45:1 or higher) or plural component airless equipment, using a 0.63 mm (0.025 inch) reverse tip or larger. Pump should be equipped with 3/8" internal diameter high pressure spray hose to improve spray characteristics, the use of an in-line heater is recommended.

MIXER-Use power mixer powered by an air motor or an explosion proof electric motor.

Environmental Conditions

(during application, drying and curing)

Optimum material temperatures are between 20° and 25° C. At lower temperatures spray properties are affected, at higher temperatures the working time decreases. If material has been stored below 20° C, warm to minimum 20° C before mixing to achieve proper atomisation.

Air Temperature 5° to 40° C

Surface Temperature 5° to 40° C

To prevent moisture condensation during application, surface temperature must be at least 3° C above dew point.

Drying Times

	10° C	20° C	30° C
dry to recoat			
minimum	28hrs	14 hrs	9 hrs
maximum	5 days	3 days	3 days
dry through	38 hrs	24 hrs	16 hrs

NOTE: Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions. Times are proportionally shorter at higher temperature and longer at lower temperatures. Prior to recoating ensure the surface is clean. Consult your Ameron representative for specific recommendations.

Application Procedure

Amercoat 339 is packaged in two components in the proper proportions:

Resin 3 gallons in 5 gallon pail

Cure 1 gallon in 1 gallon can

Thinner Not recommended

Cleaner T-10 Thinner

1. Flush equipment with recommended cleaner.
2. Stir both resin and cure to an even consistency with a power mixer. Add cure to resin and continue mixing until a uniform consistency is achieved.
3. Apply in a wet coat in even parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.

4. Higher temperatures shorten the pot life. Lower temperatures affect sprayability.
5. Ventilation with clean air is required during application. Before recoating and curing to dry film, no condensation is allowed.
6. Check film thickness using a wet film thickness gauge. If less than 250 microns, apply additional material. Total dry film thickness of the Amercoat 238/Amercoat 339 system must not exceed 600 microns for best performance.
7. Do not thin for any reason!
8. Pot life is 1 hours at 20° C. Due to pot life limitation, cleaning of equipment must start as soon as possible after application is completed. Never mix more material than can be sprayed in 1 hour. Note that in hot climates for single component airless the material temperature should be 20° C to 25° C prior to mixing otherwise pot life becomes very short. Residues of mixed material can develop very high temperatures and must be discarded to avoid excessive heat build up in the can (e.g. by pouring out in thin layers).

Caution

Keep away from heat and open flame. Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. If used in confined areas, observe the following precautions to prevent hazards of fire or explosion or damage to the health:

1. Circulate adequate fresh air continuously during application and drying.
2. Use fresh air masks and explosion proof equipment.
3. Prohibit all flames, sparks, welding and smoking.

Do not empty into drains. Take precautionary measures against static discharges. For specific information on hazardous ingredients, required ventilation, possible consequences of contact, exposure and safety measures see Safety Data Sheet.

Safety Precautions

Read material safety data sheet before use. Safety precautions must be strictly followed during storage, handling and use.

CAUTION -Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep spray mists and solvent vapour concentrations within safe limits and to protect against toxic hazards. Necessary

safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. Ameron makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which Ameron is unaware and over which it has no control. If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either

replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Ameron in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Ameron of such non-conformance as required herein shall bar Buyer from recovery under this Warranty.

Ameron makes no other warranties concerning the product. No other warranties, whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.

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Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

Limitation of Liability

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