

# Amercoat<sup>®</sup> 357

Epoxy acrylic

# **Product Data/ Application Instructions**

- Formulated for direct to metal application
- Attractive, high gloss appearance
- Good gloss retention
- Low VOC
- High solids
- Application over wide range of temperatures

Amercoat 357 is a uniquely modified epoxy coating which has outstanding gloss retention as well as the corrosion resistance of a conventional epoxy coating.

Amercoat 357 is a high-performance coating for rail, industrial, marine, offshore, and general maintenance applications.

Amercoat 357 provides a smooth, attractive, high gloss finish. It can be applied directly to blasted steel, or for improved corrosion resistance, apply over primed surfaces.

# **Typical Uses**

- Exterior of rail cars
- Marine vessels
- Tank exteriors
- Structural steel
- Piping
- Water towers
- Industrial exposures.
- Contact your Ameron representative for specific information regarding other uses.

# **Typical Properties**

Humidity (ASTM D2247)	750 hours
face corrosion, blistering	None
Salt spray (ASTM B117)	1000 hours
face blistering	None

# **Chemical Resistance Guide**

<u>Environment</u>	Splash and Spillage	357FD hard	0.6	1	4
Alkaline Solvents	aline Excellent vents Good	357 357FD	5 3	9 5	24 12
Salt Water Water	Excellent Excellent	recoat minimum (hours) 357 357FD	$\frac{4}{2}$	7 4	16 10

357FD Formerly Amercoat 3479

# **Physical Data**

Finish	Gloss			
Color	See colo	or card		
White and light colors may show ye	ellowing on	aging.		
Components	2	0 0		
Curing mechanism	Solvent	release a	nd chem	ical
0	reaction	1		
Volume solids (Calculated)	66% ± 3	3%		
Dry film thickness per coat	4-6 mils	s (100-15	0 micror	ıs)
Coats	1 or 2			
Coverage	ft²/gal			
1 mil (25 microns)	1059			
4 mils (100 microns)	353			
6 mils (150 microns)	212			
VOC	lb/gal		g/L	
357	2.4		288	
357ED	2.1		207	
Tomporaturo limit	2.J °E		291 °C	
	200		0.2	
Continuous	200		93	
Flash point (SEIA)	F		-C	
357 resin	113		47	
357 cure	83		28	
357FD cure	96		35	
Amercoat 65	81		27	
Amercoat 101	145		63	
Amercoat 12	2		-17	
Application Data				
Application Data				
Applied over	Prepare	d steel or	· primed	steel
Surface preparation				
steel	SSPC-SI	P3,6,7, or	10	
primed steel	Amerco	at 370, 3	385,	
	Amerlo	ck 400, 2		
Method				
357	Airless	or conver	itional si	oray
357FD	Plural c	omponen	t airless	sprav
Mixing ratio (by volume)	1 nart r	esin to 1	nart cur	орга <u>ј</u> Р
Pot life (hours)	90°F	70°	F <sup>1</sup>	50°F
357	1	11/2		2
357FD	1,6	1/2		3/4
Environmental conditions	75	72		/1
Temperature	°F		°C	
air	35 to 13	22	2  to  50	
surface	35  to  14	40	$\frac{1}{2}$ to 50	
Surface temperatures must be	at least 5°l	F (3°C) ab	ove dew	noint
to prevent condensation	at loast 5	(0 C) ui	/010 ucm	point
Drving time (ASTM D1640) (ho	urs)	°F/°	С	
Drying time (ADTM D1010) (no	90/32	70/21	50/10	32/0
touch	0/02	10/21	50/10	52/0
357	2.5	4	15	48
357FD	0.6	1	4	8
hard	0.0	1	1	0
357	5	9	24	72
357FD	3	5	12	36
recoat	5	5	12	50
minimum (hours)				
357	4	7	16	79
357FD	т 2	4	10	26
maximum (dave)	4	Ŧ	10	50
357 and 357ED	14	14	1/	1/
Thinner	Amoreo	at 101 6	5 17	14
Cleaner	Amerco	at 121, 0	5	
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# **Surface Preparation**

Coating performance is proportional to the degree of surface preparation. Refer to specifications for the specific primer being used. Prior to coating, primed surface must be clean, dry, undamaged and free of all contaminants including salt deposits. Round off all rough welds and remove all weld spatter.

Steel - Remove all loose rust, dirt, grease or other contaminants by one of the following depending on the degree of cleanliness required: SSPC-SP3, 6 or 7. UHP waterjetting per SSPC-SP12/NACE No. 5, WJ-2L or better is also acceptable for coated steel previously prepared to SP-10 or better. For more severe service, clean to SSPC-SP10. The choice of surface preparation will depend on the system selected, the end-use service conditions, and performance expectations.

Blast to achieve a surface profile not to exceed 2 mils (50 microns) as indicated by a Keane-Tator Surface Profile Comparator Testex Tape. Increase coating thickness if profile greater than 2 mils.

Galvanizing - Remove oil or soap film with neutral detergent or emulsion cleaner; then use zinc treatment such as Galvaprep<sup>®</sup> or equivalent or blast lightly with fine abrasive.

Aluminum – Remove oil, grease or soap film with neutral detergent or emulsion cleaner; treat with Alodine® 1200, Alumiprep<sup>®</sup> or equivalent or blast lightly with fine abrasive.

Repair - Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating. Thoroughly remove dust or abrasive residue before touch up.

# Application Equipment

The following is a guide; suitable equipment from other manufacturers may be used. Changes in pressure and tip size may be needed for proper spray characteristics.

### For Amercoat 357:

**Airless spray** – Standard equipment such with 30:1 pump ratio or larger with a 0.015- to 0.021- in. (0.38 to 0.53 mm) fluid tip.

**Conventional spray** – Industrial equipment such as DeVilbiss MBC or JGA spray gun with 78 or 765 air cap and "E" fluid tip, or Binks No. 18 or 62 gun with a 66 x 63PB nozzle set up. Separate air and fluid pressure regulators, mechanical pot agitator, a moisture and oil trap in the main air supply line are recommended.

Power mixer - Jiffy Mixer powered by an air or an explosionproof electric motor.

### For Amercoat 357FD:

Plural component airless spray – Airless spray 1:1plural component. Equipment that is generally used follows:

- a. 5:1 or 10:1 Transfer Pumps
- b. 12" x ¾" 24 element Static Mixer c. 50' of ¾" Fluid Line
- d. 30:1 pump or larger

e. Fluid tip with a 0.015-to 0.021" orifice

# **Application Procedure**

Amercoat 357 consists of two components which must be mixed together before use. It is packaged in the proper portions in 2- or 10-gallon units.

- 1. Flush equipment with thinner or Amercoat 12 before use.
- 2. Stir each component thoroughly, then combine resin and cure and mix until uniform.
- 3. Thin only if necessary for workability, add Amercoat thinners up to ½ pint (approximately 6%) per gallon of Amercoat 357. Use Amercoat 65 when faster drying is desired. Use Amercoat 101 when slower drying is desired. Use only Ameron recommended thinners.
- 4. Do not mix more material than will be used within pot life. Pot life is shortened by higher temperatures.

# Shipping Data

Packaging units 357 resin 357 cure 357FD cure	2 ga 1 gal can 1 gal can 1 gal can	10 gal 5 gal pail 5 gal pail 5 gal pail
Shipping weight (approx)	lb	kg
2-gal unit 357 resin 357 cure 357FD cure	12.0 10.0 10.0	$5.4 \\ 4.6 \\ 4.6$
10-gal unit resin cure 357FD cure		$27.5 \\ 23.0 \\ 23.0$

Shelf life when stored indoors at 40 to 100°F (4 to 38°C) cure, resin 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions. The mixed product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

# **Safety Precautions**

Read each component's material safety data sheet before use. Mixed material has hazards of each component. 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 solvent vapor 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 and space, of which Ameron is unaware and over which it has no control.

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

**Note:** 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.

This product is for industrial use only. Not for residential use.

# 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.** 

## 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 invoices 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 nonconformance 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.

Any recommendation or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.



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