

# Heresite UC-5500 Series

## Our 50 years of coating history speaks for itself.

In 1964, Heresite was the first company to apply coatings to aluminum-finned, copper-tubed heat exchangers. The Heresite coating became then, and still remains a standard in the industrial coatings industry. We provide the highest quality protective coatings for air conditioning and refrigeration systems that operate in moderate to severely corrosive environments, including both coastal and/or industrial applications.

## A high performance polyurethane specially designed to provide superior performance in demanding environments.

UC-5500 is formulated as a top coat for other Heresite Coatings. It exhibits outstanding UV resistance with excellent weathering qualities, along with good flexibility and good abrasion resistance. This two component coating is typically sprayed on the exterior surfaces of heat exchangers and related equipment, process equipment, transport vessels, tanks and structural steel.

## UC-5500 Series Specifications

### Abrasion Resistance: ASTM D 4060:

No more than 165 mg loss CS-17 Wheel 1kg load, 1000 cycles

### Cyclic Weathering: ASTM G 85 Annex A5:

At 2,000 hours no face blistering, no face rusting. 0-2.5 mm scribe creepage.

### Corrosion Resistance: ASTM B 117-94:

At 1,500 hours No face blistering, no face rusting. 0-2.5 mm scribe creepage.

### Adhesion – Crosshatch: ASTM D 3359 5B

### Adhesion – Elcometer: ASTM D 4541 1100+ PSI

### Exterior Exposure: ASTM D 1014-83

Miami, FL, 97% gloss retention after 12 months.

### Flexibility: ASTM D 522

No cracking or delamination of film after full cure.

### QUV: ASTM D 4587

1,000 hours, passes

### Pencil Hardness: ASTM D 3363-74

2B-HB

### Heat Resistance: ASTM D 2485

Passes at 250°F (121°C)

### Impact Resistance: ASTM 2794

Direct 100 in./lbs., Reverse 30 in./lbs.

**Product Description**

High Solids Acrylic Polyurethane

**Recommended Uses**

Heresite UC-5500 series is a high performance coating used principally as an exterior coating for chemical process equipment, storage tanks, and other applications where flexibility, toughness, hardness, abrasion resistance and weatherability are required.

**Chemical Resistance**

See chemical resistant guide at the end of the document.

**Packaging Information**

UC-5500 series is available in one gallon and five gallon kits. Both Part A and Part B are provided in short filled cans, allowing for accurate and easy mixing.

**Thinners and Cleanup**

Do not thin

**Storage Conditions**

Coating should not be stored longer than 2 years. Coating should be stored in a clean, dry environment at 50-75°F. Keep out of direct sunlight. Avoid excessive heat and keep from freezing.

**Physical Properties**

Solids by weight: Approximately 75%  
Solids by volume: Approximately 62%  
Pot life: 3 hours at 70oF (21oC) and 50% relative humidity. Extreme temperature or humidity can drastically change pot life.  
Induction Time: None

Mixing Ratio by Volume: 9 parts resin to 1 part cure

Shelf life: 2 years

Color: Black, Gray, Red and Brown available

**VOC Content**

2.63 – 2.83 lbs/gal (270 g/L) as supplied

**Film Thickness**

Dry Film Thickness/Coat: 2.0 – 3.0 mils

Wet Film to Achieve DFT 3.0 – 5.0 mils

**Coverage**

Theoretical coverage is 994 square feet per gallon per dry mil. Coverage rates are estimates and make no allowance for material loss. Actual rates will vary dependent on application method, surfaces, etc.

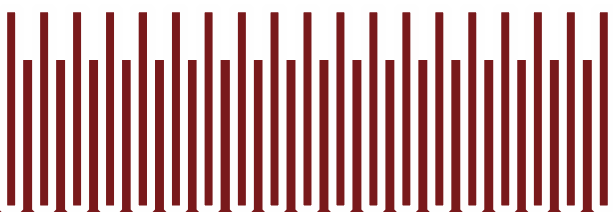
**Surface Preparation**

All surfaces must be clean, sound, and free of any oils, dirt, grease, wax and any other contamination that may interfere with coating adhesion. For best results all bare surfaces must be properly prepared and primed prior to application of this product.

It is recommended to apply a primer of Heresite VR-514 or Heresite P-413.

**Previously Painted Metal Surfaces:**

Power or hand washing is recommended to remove contamination. If oil or grease is present, a cleaner would be required – ensure cleaner is compatible with paint. Cleaner should be completely rinsed. All part to completely dry before application of product. Remove all loose coatings, rust and corrosion by scraping, sanding or sand blasting. In cases where there is a large amount of contamination, a commercial blast is





acceptable in accordance with NACE #3 or SSPC-SP-6-63 specifications.

**Thinning**

Do not thin

**Application**

Part A and Part B are packaged in premeasured kits – with Part A being a short filled gallon allowing Part B to be added and mixed. The mixing ratio is 9 parts A to 1 part B. Mix Part A and Part B separately using an explosion-proof powder drill and blade type mixer. Add part B to Part A and thoroughly mix and blend using an explosion-proof power drill and blade type mixer. Mix only the amount that can be used within the estimated pot life. For optimum application, air and surface temperature should be from 10 to 32C and at least 5F above the dew point. Above 50C, sagging may occur.

Spray application is preferred.

For an airless sprayer – flush lines with an appropriate solvent. Equipment must be clean prior to start. Apply the product in even coats and maintain a wet edge. Use parallel passes with 50% overlap to avoid bare areas and pinholes. If required, cross spray at right angles.

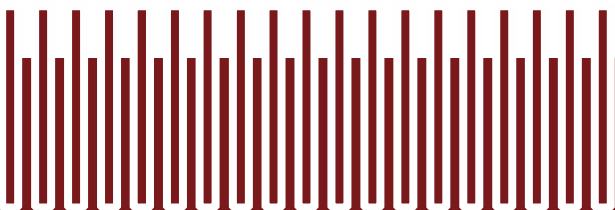
1. Tip orifice: 0.013” to 0.015”
2. Atomizing Pressure: 2500-3000 PSI
3. Material Hose ID: ¼”
4. Manifold Filter: 60 mesh

**Drying Time**

Drying Time	At 90°F (32°C)	At 70°F (21°C)	At 50°F (10°C)
Set to Touch	30 minutes	1.5 hours	1.5 hours
Dry Through	4 hours	5 hours	10 hours
Recoat Time - Minimum	4 hours	5 hours	10 hours
Recoat Time - Maximum	7 days	30 days	60 days

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials. **CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKERS MUST WEAR FRESH AIR LINE RESPIRATORS. PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMERS SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.**

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**Chemical Resistance for Splash**

Solvents:	Rating	Acid:	Rating	Oils:	Rating	Miscellaneous:	Rating
MEK	VG	Acetic Acid 5%	E	Dirty Motor Oil	VG	Bleach	E
Toluene	VG	Acetic Acid 10%	E	Brake Fluid	VG	Dowanol PM	VG
Xylene	VG	Sulfuric Acid 5%	E	Skydrol	VG	Water	E
Unleaded Gas	VG	Sulfuric Acid 10%	E	Diesel Fuel	E	Hydrogen Peroxide 3%	E
Denatured Alcohol	E	Sulfuric Acid 50%	E	Aviation Hydraulic Fluid	G	Povidone Iodine 10%	G
Methanol	VG	Hydrochloric Acid 5%	E	10W30	E	TSP 1%	E
Mineral Spirits	E	Hydrochloric Acid 10%	E	Aircraft Motor Oil	E	TSP 10%	E
Triethylamine	VG	Hydrochloric Acid 37%	VG	Disc Brake Fluid	G	Windex w/ ammonia	E
N-Butanol	VG	Phosphoric Acid 10%	E			Pot Ash	E
MIBK	VG	Phosphoric Acid 50%	E	<b>Salts and Bases:</b>	<b>Rating</b>	Phosphate Fertilizer	E
Phenol PM Acetate 5%	G	Phosphoric Acid 85%	E	Sodium Hydroxid 10%	E	Nitrogen Fertilizer 28%	E
Isopropyl Alcohol	E	Oleic	E	Sodium Hydroxide 50%	E		
Butyl Cellosolve	VG			Ammonium Hydroxide 10%	E		
Perchlorethylene	VG			Ammonium Hydroxide 28%	E		
Ethylene Glycol	E						

**Rating:** E – Excellent, VG – Very Good, G – Good

The chemical ratings in the above table is indicative for general resistance to periodic chemical splash and spillage.