



ESTABLISHED 1935

TECHNICAL BULLETIN

CSE-6000

January 2009

CSE-6000 Series Epoxy Coatings

Generic Type:

A two packaged amine adduct cured, cold set epoxy.

Recommended Usage: Heresite CSE-6000 is primarily used for lining tanks, coating process equipment, and is an industrial maintenance material. It is easily applied to metal, concrete, and wood.

CSE-6000 Series meets the requirements of 21 CFR 175.300 FDA for Direct Food Contact

Chemical Resistance Guide:

EXPOSURE IMMERSION SPLASH & SPILLAGE

Acids	Fair	Good
Alkalies	Good	Excellent
Solvents	Fair	Good
Water	Excellent	Excellent
Salt-Water	Excellent	Excellent

Force curing is required when exposure is severe.

Ordering Information:

Shipping Weight:

CSE-6000	Approx. 13 lbs. / gal.
S-300 Solvent	Approx. 8 1/2 lbs. / gal.
S-310 Solvent	Approx. 8 1/2 lbs. / gal.
S-330 Solvent	Approx. 8 1/2 lbs. / gal.

Flashpoint (T.C.C):

CSE-6000	23°F (-5°C)
S-300 Solvent	23°F (-5°C)
S-310 Solvent	23°F (-5°C)
S-330 Solvent	23°F (-5°C)

Primer

Not required

Packaging

CSE-6000 Series available in 1 gallon and 5 gallon kits.

Shelf Life

24 months at 70°F in unopened containers.

Pot Life:

8 Hours at 70°F

Physical Data:

Solid by Weight: Approx. 68%

Solid by Volume: Approx. 51%

(Note: Solids vary with color)

Viscosity: 65 Krebs Units

Flexibility: Passes Zuhr Conical Mandrel
1/2" bend.

Temperature Limitation: HERESITE CSE-6000 accepts dry heat temperatures up to 275°F (135°C). Temperature excursions up to 400°F (205°C) can be tolerated for short durations.

VOC: 3.6 lbs. / gal. as supplied.

Standard Colors:

CSE-6004 = Brown CSE-6006 = Gray
CSE-6008 = Ivory CSE-6101 = White
(Other Colors Available Upon Request)

Coverage: Theoretical coverage - 818 square feet per gallon per mil. (At 7 mils DFT average coverage would be 93 square feet per gallon. This includes a 20% loss factor.)

Environment

Immersion
Highly Corrosive Fumes
Mildly Corrosive Fumes
Maintenance

DFT

12-15 mils

6- 8 mils

APPLICATION INSTRUCTIONS

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 WORKMEN MUST WEAR FRESH AIR LINE RESPIRATORS. HYPERSENSITIVE 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, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

Surface Preparation:

Remove all oil, grease, and other contaminants. All seams should be continuously welded, weld splatter removed and all edges radiused. (See Bulletin #113 "Fabrication Specifications.")

STEEL:

Immersion: A white metal blast is required in accordance with NACE #1 or SSPC-SP-5 specifications.

Non-Immersion: A commercial blast is acceptable in accordance with NACE #3 or SSPC-SP-6 specifications. Surface profile or anchor pattern shall be 20-25% of the recommended dry film thickness.

CONCRETE:

Remove protrusions by sanding or grinding. Concrete must be cured 28 days at 70°F (21°C) and 50% relative humidity.

Immersion: Dry abrasive blast to open all voids. Blow or vacuum off residue.

Non-Immersion: Surfaces must be acid etched or abrasive blasted to remove latency.

Equipment:

1. All spray equipment shall be thoroughly cleaned and be free of old paint film and other contaminants.
2. Use standard production type spray guns:
3. Air supply shall be uncontaminated
4. Airless spray equipment: 1800-2200 PSI liquid pressure. Tip size from .015" to .019". Thinning requirements are less than for conventional spray.

Mixing: Stir Part A thoroughly, then stir Part B thoroughly. Add contents of Part B to the container of Part A. Mix thoroughly and allow the mixed material to age 30 minutes before using. Mixed material must be used within 8 hours.

Primer: Self priming on steel. On concrete or wood a primer coat is recommended, consisting of 1 part coating to 2 parts solvent.

Thinning: The type and amount of thinner required is dependent upon temperature, ventilation, humidity, spray equipment used, and desired film thickness. Suggested thinning at 75°F (24°C) is 20 - 30%. Heresite S-330 solvent is the fastest drying. It is recommended for normal applications. Heresite S-310 solvent can be used when a slower drying solvent is required. Heresite S-300 solvent is the slowest evaporating. (If immersion service is expected after using S-300 solvent, the coating must be force cured following a schedule listed below.) (Viscosity of 40-45 sec. - Zahn Cup #2.)

APPLICATION:

1. Do not apply if temperature is less than 5°F (2°C) above dew point.
2. Adjust air pressure to approx. 80 lbs. at the gun and provide 15-20 lbs. pot pressure. Adjust spray gun by first opening liquid valve and then adjust air valve to give approx. an 8"-12" fan.
3. Holding gun perpendicular to the surface at a distance of 12", apply a mist bonding pass.
4. Allow to flash off for several minutes, but not long enough to allow film to completely dry.
5. Apply 3 to 4 criss-cross multi-passes maintaining a wet appearing film.
6. Repeat step #5 until desired film thickness is obtained.
7. Clean equipment immediately with HERESITE 310 or S-330 solvent.
8. Let first coat air dry with ventilation for 16 hours, but not longer than 72 hours.
9. For second coat, repeat steps #1 through #7.
10. Coating should be final cured according to the following schedule:

70°F (21°C) - 7 Days

50°F (10°C) - 14 Days

Force Cure

1. If force curing is required, air dry with ventilation for approximately 2 hours.
2. After the air dry period has elapsed, the temperature should be raised in 40°F (22°C) increments every 30 minutes.
3. Hold at desired curing temperature according to the following schedule to effect final cure:
130°F (55°C) 18 Hours
160°F (71°C) 4 ½ Hours
200°F (93°C) 1 ¾ Hour