

Heresite B-31

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 to protect components that operate in moderate to severely corrosive environments, including both coastal and/or industrial applications.

A high performance baked phenolic coating.

HERESITE B-31 baking phenolic coating is a high performance coating capable of providing protection in severe and chemically corrosive environments.

B-31 Typical Properties

Solvent Resistance: ASTM-5402: 100 acetone double rubs

Cross-hatch adhesion: ASTM B-3359: 5B

Hardness: ASTM-D3363: 5-6H

Gloss: 95 - 115 on 60-degree meter

Product Description

Baking Phenolic

Recommended Uses

HERESITE B-31 baking phenolic coating offers consistent, high-quality service in a wide range of applications. The corrosion resistance of B-31 appreciably increases service life of equipment.

Chemical Resistance

B-31 is chemically resistant to a wide range of acids, solvents, and inorganic salts. Please review chemical resistance guide for further information.

Temperature Limitation

Heresite B-31 accepts dry heat temperatures up to 400°F (204°C)

Packaging Information

B-31 series is available in one gallon, five gallon and 54 gallon drum quantities.

Thinners and Cleanup

Recommended use of Heresite S-275

Storage Conditions

Coating should not be stored longer than 6 months. 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 32%

Solids by volume: Approximately 24%

Induction Time: NA

Mixing Ratio by Volume: NA

Color: Black

VOC Content

4.94 lbs/gal (592 g/L) as supplied

Film Thickness

Recommended total dry film thickness (DFT) is 4 to 6 mils (100-150 microns) in a 2 to 4 coat system.

Coverage

Theoretical coverage is approximately 375 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 prior to application of this product.

It is recommended to commercially blast in accordance with NACE #1 or SSPC-SP-5 specifications. Surface profile or anchor pattern shall be 20-25% of the recommended dry film thickness.

Thinning

B-31 is provided at spray viscosity for most applications. If additional adjustments are needed, reduce with Heresite S-275.

The amount of thinner required is dependent upon temperature, ventilation, humidity, application type and desired film thickness.

Spray Application

1. Consult SDS prior to use.
2. Do not apply if temperature is less than 5°F above dew point, or if temperature is below 45°F.

3. Use standard production type spray equipment (conventional, HVLP, airless, etc.). A few starting recommendations can be found below:

Guns	Fluid	Air
DeVilbiss JGA-510	E	46MP
Binks #2100	67-SS	46-21MD-2 or 3
Binks #95	66-SS	66-SD

Graco Air Pro HVLP

Airless spray equipment, 1500-1800 psi liquid pressure.

Tip size from 0.013" to 0.018".

4. Spray viscosity will be dependent on type of equipment being used. It has been seen that spraying at dip viscosity is very effective.
5. Spray equipment: always flush spray equipment with solvent to clean prior to applying coating.
6. Air supply must be uncontaminated. Adjust air pressure to approximately 80 pounds at the gun and provide 15-20 pounds at pressure pot. Adjust spray gun by first opening liquid valve and then adjust air valve to give approximately an 8"-12" fan, holding gun perpendicular to the surface at a distance of 12".
7. Apply a mist bonding pass.
8. Allow to flash off for approximately a minute, but not long enough to allow film to completely dry.
9. Apply 3-4 crisscross multi-passes maintaining a wet appearing film approximately 3-4 wet mils. This will achieve a dry film thickness of approximately 0.5-1.5 mils.
10. Air dry a minimum of 60 minutes with ventilation prior to introducing heat.
11. Typically, a two to four coat process is required to achieve 4.0 to 6.0 mil DFT. An intermediate bake is required between each coat, allowing to cool to room temperature before next coat is applied – see baking schedule.

Bake Schedule

Intermediate Bake:

1. 90-120°C (metal temperature) held for 10-20 minutes

Final Bake:

1. 90°C (metal temperature) held for 10 minutes, then increased to 160°C. 160°C (metal temperature) held for 15 minutes, then increased to 180°C. 180°C (metal temperature) held for 30 minutes.
2. To determine correct bake, saturate a cloth with S-275, rub coating lightly. Coating should wipe off between coats, but should not after final bake (cure).

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.

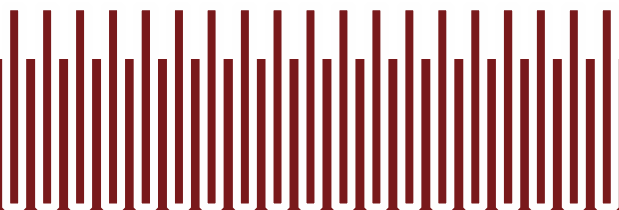
CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKERS MUST WEAR FRESH AIR LINE RESPIRATORS. PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL 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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TECHNICAL DATA SHEET



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