

67 Series

ChemTemp Hybrid Epoxy Novolac DTM/Liner



Chem-Temp 67-HF Series is a thin film 2-K Hybrid Epoxy Novolac Liner Coating that offers exceptional temperature and chemical protection up to 250°F. Specifically formulated for tank linings, vessels, and pipelines, 67-HF Series provides superior barrier properties for a wide array of cargos in a 1 – 2 coat application.

Tech Specs

Heat Resistance:	250°F for immersion services 350°F for dry heat services
Vehicle Type:	Hybrid Epoxy Novolac
Reducer:	Not Normally Required
If desired:	#670S (slow) #670M (medium) #670F (Fast)
Mix Ratio:	4:1 Base to Activator
Base:	67-HF-####
Activator:	67-AHF-100
Pot Life:	3 Hours @ 77°F (Decreases in higher temperatures)
Volume Solids:	70%
Theoretical Coverage:	1122ft ² /gal. @ 1 mil DFT
VOC:	<247 g/L
Flash Point:	24°F (Lowest Flashing Component)

Dry Film Thickness:

Light Service: 6-10 mils DFT in 1-2 coats

Standard Service: 8-16 mils DFT in 2 coats

Wet Film Thickness: 8.6 – 11.4 mils WFT per coat

Dry-time: **Normal**

To Touch: 4 Hours

To Recoat: Minimum – 3 Hours

Maximum – 36 Hours

Full Cure: 7 Days or 24 Hours after final coat
when force cured

Shelf Life: 2 Years Minimum

Finish: Eggshell

Color: Off White & Light Blue

Packaging: 5 Gallon & 1 Gallon Kits

Storage Temperature: 20°F - 110°F

Surface Preparation

All surfaces should be clean, dry and free of all foreign contaminants.

A SSPC-SP1 Solvent Cleaning with Highland 901 Cleaning Solvent is recommended before blasting or other cleaning method.

Carbon Steel - Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

Best: A SSPC-SP5/NACE 1 White Metal Blast Cleaning is recommended for maximum coating performance and longevity.

Good: A SSPC-SP10/NACE 2 Near White Metal Blast Cleaning provides good results.

Carbon Steel - Non-Immersion:

Obtain a 2-3 mil angular blast profile using one of the recommended methods below.

Best: A SSPC-SP10/NACE 2 Near White Metal Blast Cleaning is recommended for maximum coating performance and longevity.

Good: A SSPC-SP6/NACE 3 Commercial Blast Cleaning provides good results.

Galvanized Steel:

Contact a Highland representative as recommendation will vary depending on substrate and exposure conditions.

Note: Allow one week at 77°F before being put into service (unless force cured). The second coat/topcoat must be applied within 36 hours at 77°F or the surface will need to be scuffed.

Mixing & Application

Mixing: Highland 67 Series needs to be thoroughly mixed using mechanical agitation. Mix entire contents of Part "A" Activator (67-AHF-100) with Part "B" Base (67-HF-####) (4:1 by volume) Product is ready to spray after proper mixing and a 30 minute induction period.

Reduction: Reduction is not required, if desired, reduce by 0% - 10% with Highland #670 reducer.

Highland 67 Series is designed for spray application. To ensure optimal performance, apply according to recommendations below.

Airless Gun: Graco 205-591
Pump: 30:1/45:1/60:1
Tip Range: 3.013 – 4.017
Pump Pressure: 1,800 psi Minimum
Hose: 3/8 inch ID

Brush or Roller: Both are acceptable for touch up.

Conventional Gun: DeVilbiss MBC-510
Fluid Tip: E
Air Cap: 704
Atomizing Pressure: 70 psi
Pot Pressure: 15-20 psi
Hose: 1/2 inch

Clean Up: Highland #901 Cleaning Solvent

Typical Systems

Light Service: Apply 6-10 mils DFT of 67 Series in 1-2 coats directly to prepared steel.

Standard/Immersion Service: Apply 8-16 mils DFT of 67 Series in 2 coats at 6-8 mils per coat directly to prepared steel.

Highland 67 Series may also be topcoated with a variety of Highland Topcoats. Contact your Highland representative for details.

Advantages

- Next generation polymer technology specifically engineered for heat stability and chemical resistance
- Dry heat stability up to 350°F, immersion up to 250°
- Superior resistance to a wide variety of chemicals and solvents
- Superior abrasion resistance
- Superior adhesion even over marginally prepared surfaces
- Excellent corrosion resistance
- Ease of application
- Specially engineered inert filler package provides superior barrier properties
- Superior substrate wetting provides excellent adhesion and corrosion protection
- Ultra-high crosslink density provides a tough durable film with long lasting protection

Performance Data

Adhesion > 1800 psi
(ASTM D 4541) – Commercial Blast

Abrasion Resistance Excellent - 124 mg loss
(ASTM D 4060) 1000 Cycles, 1000g load

Humidity Resistance Excellent – No blistering or other defects observed
(ASTM 4585) 3000 hours

Salt Spray Resistance Excellent - <1 mm creep from scribe, no blistering
(ASTM B 117) 3000 hours

Chemical Resistance Excellent – MEK – No defects observed
(ASTM D 1308) 25% H2SO4 – Slight discoloration, no other defects observed
25% NaOH – slight loss of gloss, no other defects observed

Pencil Hardness 6H
(ASTM D 3363)

Elongation 5%
(ASTM D 522)

Safety Information

- Use normal precautions such as gloves, facemasks and barrier creams.
- Adequate ventilation must be maintained. In confined areas, applicators must wear constant flow airline respirators.
- If product comes into contact with skin, wash thoroughly with lukewarm water or diluted Boric Acid, and obtain immediate medical attention.
- This product contains FLAMMABLE materials. Keep away from sparks and open flames. Observe NO SMOKING regulations.
- All electrical equipment and installations should conform to NEC regulations. In areas where explosion hazards exist, applicators should be required to use nonferrous tools, and to wear conductive, non sparking shoes.
- Observe low flash regulations.
- Refer to Safety Data Sheet (SDS) for complete safety instruction

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