



Highland International, Inc.



Technical Data Sheet

74-HF Series Chem-Temp High Temperature Epoxy Lining (HAPS Free)

Chem-Temp Series is a high build 2-K novolac epoxy specifically formulated to provide exceptional temperature and chemical protection. Chem-Temp is designed to be used as a DTM liner to withstand acidic, caustic, and high heat environments. With the proper reducer selection, Chem-Temp may be modified so that it may be applied directly to hot surfaces up to 400°F.

Vehicle Type:	Epoxy Novolac	Dry-Time:	Normal Application	Hot Application
Pigmentation:	Lead Free	To Touch	4 hours	n/a
Reducers:	Not normally required	Tack Free	6 hours	n/a
for Hot Application:	Highland #101 Reducer	To Recoat	3 hours - 36 hours (max)	30 seconds
Mixing Ratio:	4:1 (4 parts base to 1 part activator)	To Topcoat	6 hours - 36 hours (max)	n/a
Pot Life:	3 Hours @ 77°F	To Handle	6 hours	n/a
	(Decreases at higher temps)	Put in Service	After topcoating wait 3 hours before heating	
Volume Solids:	70%	V.O.C.:	2.06 lbs. per gallon (247 grams/liter)	
Theoretical Coverage:	1120 Sq. Ft. per gallon @ 1 mill DFT	Shelf Life:	1 year minimum	
Flash Point:	24°F lowest flashing component	Finish:	Eggshell	
Recommended DFT:	Primer: 4-16 mils	Color:	yellow, red	
	DTM: 8-16 mils	Cure Time:	5-7 days @ 77°F for full cure.	
Weight:	14 lbs/gal			

Preparation:

1) Surface preparation should be in accordance with SSPC-SP-5 White Metal Blast Cleaning. When White Metal Blast cleaning is not an option, SSPC-SP 6 Commercial Blast Cleaning is acceptable and provides good results. All surfaces to be painted should be dry and free of all foreign contaminants.

2) Minimum surface preparation should be in accordance with SSPC-SP-5 White Metal Blast Cleaning for immersion.

Application Requirements: 1) Mix entire contents of part "A" Activator with Part "B" Base (4 to 1 by volume) 2) Mixed material is ready for use after a 30 minute induction period. 3) Apply a minimum of 4 mils DFT per coat. 4) Apply at a rate of 70 to 280 square feet per gallon to obtain the recommended film thickness when using as a primer. 5) Apply at a rate of 70 to 140 square feet per gallon to obtain the recommended film thickness when using as a DTM. 6) Allow one week before being put into service for immersion.

The second coat or topcoat must be applied within 36 hours @ 77°F or the surface will need to be scuffed.

Special Notes for Hot Application: 74-HF Hot Application formula may be applied directly to hot surfaces not exceeding 400°F.

1) Mix entire contents of part "A" Activator with Part "B" Base (4 to 1 by volume). 2) Mixed material is ready for reduction after a 30 minute induction period. 3) Reduce 20% with Highland #101 Hot Application Reducer and apply in multiple successive coats not exceeding 2 mil DFT to achieve the recommended film thickness.

Method of Application:	Conventional Spray	Airless Spray:
Gun:	DeVilbiss MBC-510	Gun: Graco 205-591
Fluid Tip:	E	Pump: 30:1
Air Cap:	704	Tip Range: 3.013 - 4.017 @ 1800 psi minimum
Atomizing Pressure:	70 psi	Hose: 3/8" ID
Pot Pressure:	15-20 psi	
Hose:	1/2 inch ID	
Brush or Roller:	Natural or synthetic bristle recommended	
Clean Up:	After use, clean all equipment with MEK.	

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

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