

# 70-IS Series

## ChemTemp High Performance In-Situ Epoxy



ChemTemp 70-IS Series is a thin film 2-K High Performance Epoxy Liner Coating formulated for In-Situ applications. ChemTemp 70-IS offers exceptional surface tolerance and corrosion protection against an array of cargos including process water, chemicals, and fuels. This special liner has an engineered viscosity allowing for more consistent pig applications applied in fewer coats. ChemTemp 70-IS Series also offers extended pot life workability and low temperature cure characteristics for easier applications and a quick return to service.

### Tech Specs

Heat Resistance:	200°F for immersion services
Vehicle Type:	Epoxy
Reducer:	Not Normally Required
If desired:	#740S (slow)
	#740M (medium)
	#740F (Fast)
Mix Ratio:	4:1 Base to Activator
Base:	70-IS-####
Activator:	70-IS-100
Pot Life:	6 Hours @ 77°F (Decreases in higher temperatures)
Volume Solids:	80%
Theoretical Coverage:	1283ft <sup>2</sup> /gal. @ 1 mil DFT
VOC:	<180g/L

Flash Point:	16°F (Lowest Flashing Component)			
Dry Film Thickness:	10-16 mils DFT in 2-4 coats			
Wet Film Thickness:	5 – 10 mils WFT per coat			
Dry-Time:	20°F	40°F	60°F	80°F
Minimum Recoat:	26 hrs.	9 hrs.	5 hrs.	4 hrs.
Dry Hard:	53 hrs.	17 hrs.	10 hrs.	7 hrs.
Maximum Recoat:	30 days	30 days	30 days	30 days
Full Cure:	5-7 Days @ 77°F (force cure optional)			
Shelf Life:	2 Years Minimum			
Finish:	Semi-Gloss			
Color:	Off White, Gray, Custom Colors			
Packaging:	5 Gallon and 50 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.

OR

**Good:** Hand or power tool clean with acid washing to achieve a visual cleanliness level of SSPC-SP 10 with a minimum 1 mils etched profile.

#### 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 70-IS Series needs to be thoroughly mixed using mechanical agitation. Mix entire contents of Part "A" Activator (70-IS-100) with Part "B" Base (70-IS-####) (4:1 by volume) Product is ready to apply after proper mixing and a 15 minute induction period.

**Reduction:** Reduction is not required, if desired, reduce by 0% - 10% with Highland #740 reducer.

Highland 70-IS Series is designed for In-Situ Application. To ensure optimal performance, apply according to recommendations below.

**PIGing Application:** Information proprietary based on contractor experience

**Brush or Roller:** Both are acceptable for touch up.

**Spray Application:** Acceptable for touch up – May Require Reduction

**Clean Up:** Highland #901 Cleaning Solvent

## Typical Systems

**Standard/Immersion Service:** Apply 10-16 mils DFT of 70-IS Series in 2-4 uniform coats.

## Advantages

- Next generation polymer technology specifically engineered for surface tolerance and high performance
- Immersion stability up to 200°F
- Superior resistance to a wide variety of chemicals, solvents, and fuels
- Low temperature cure to 0°F
- Very good abrasion resistance
- Superior adhesion even over marginally prepared surfaces
- Superior adhesion to low profiles
- Excellent corrosion resistance
- Ease of application
- Extended pot-life for consistent workability
- Engineered specifically for in-situ applications
- Superior durability compared to competitor products in the same category

## 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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