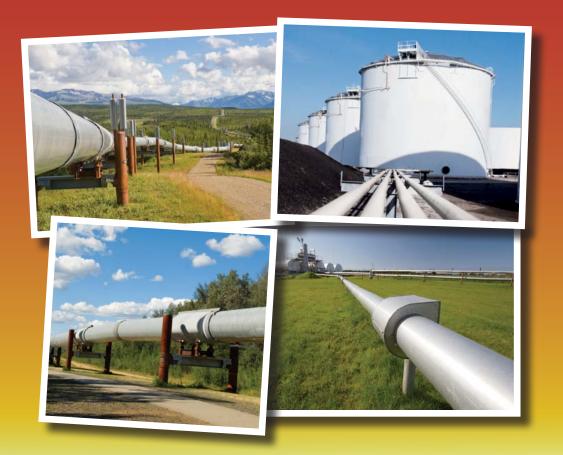
# HIGHLAND CHEM-TEMP COATINGS for PEAK PERFORMANCE







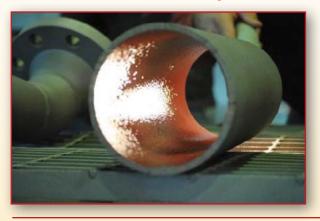


Highland International



### **HIGHLAND CHEM-TEMP COATINGS**

#### Specifically formulated for internal pipelines, tanks, and vessels, Highland Chem-Temp coatings meet a wide range of specific service requirements.



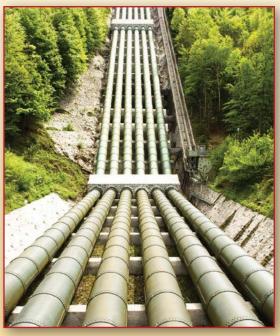
- Next generation polymer technology specifically engineered for heat stability and chemical resistance
- Superior barrier properties
- Excellent abrasion resistance
- Superior adhesion
- Ultra-high crosslink density provides tough durable film for longer lasting protection

**Chem-Temp 74-HF Series** is specifically formulated for tank linings, vessels and pipelines, providing superior barrier properties against acidic, caustic, high pressure, and high heat environments up to 300°F/149°C for immersion (350°F/176°C for some cargoes), and up to 450°F/232°C for dry heat excursions.

It is a high performance liner option offering easy application characteristics for corrosive cargo services carrying:

Brine & Other NaCl Soulutions	MEK
Carbon Dioxide	Sodium Hydroxide
Hydrogen Sulfide	Sulfuric Acid
Methane	Toluene
Methanol	Xylene & MORE

Due to its crosslink density and thermal shock resistance, 74-HF Series is also a superior option for CUI services ranging from -40°F/-40°C to 300°F/149°C, and up to 450°F/232°C for excursions.





**Chem-Temp 74-AR Series Liner** is a 3-part Direct-To-Metal coating that provides the same chemical, temperature, and pressure resistance as 74-HF Series, with added resistance to abrasion and erosion for areas such as tank floors, vessels, or pipelines carrying abrasive cargoes. 74-AR Series may be used for acidic, caustic, and high heat environments up to 300°F/149°C for constant immersion, and up to 450°F/232°C for dry-heat excursions.

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# **HIGHLAND CHEM-TEMP COATINGS**



**Chem–Temp 74-IS Series Liner** is specifically designed to allow In-Situ application while offering unsurpassed adhesion and corrosion resistance in temperatures up to 250°F/121°C for immersion and 350°F/176°C for dry heat. It equals competitor novolac technologies while surpassing competitor products in low temperature cure characteristics, allowing it to continue to cure in temperatures as low as 0°F/-17°C.

**Chem-Temp 67 Series Liner** is a cost effective 2-K coating offering all of the chemical and corrosion resistance of 74-HF Series but should be used where temperature and pressure concerns are not as great. It offers exceptional heat resistance up to 250°F/121°C for immersion and 350°F/176°C for dry heat.

**Chem-Temp 47 Series Primer/DTM** is a high-build 2-K coating specifically formulated to provide exceptional chemical and temperature protection up to 450°F/232°C. It is surface tolerant and may be applied over marginally prepared surfaces and may be used as a primer or DTM. 47 Series is also an excellent option for CUI Services up to 300°F/149°C.

74-HF Series	74-AR Series	74-IS Series	67 Series	47 Series
<ul> <li>Premium choice for chemical, high temperature and high pressure cargoes</li> <li>Heat resistance of 300°F/149°C for immersion (350°F/176°C for some cargoes), up to 450°F/232°C for dry heat excursions</li> <li>Superior barrier properties against acidic, caustic and high heat environments</li> <li>Excellent option for CUI services up to 300°F/149°C.</li> </ul>	<ul> <li>Offers same chemical, temperature and pressure resistance as 74-HF with added abrasion resistance</li> <li>Excellent adhesion with resistance to abrasion and erosion</li> <li>Heat resistance of 300°F/149°C for immersion and 450°F/232°C for dry heat</li> <li>Superior barrier properties against acidic, caustic and high heat environments</li> </ul>	<ul> <li>Exceptional temperature and chemical protection</li> <li>Formulated for In-Situ application</li> <li>Heat resistance of 250°F/121°C for immersion and 350°F/176°C for dry heat</li> <li>Low temperature cure to 0°F/-17°C</li> <li>5+ Hour pot life for extended workability</li> </ul>	<ul> <li>Comparable chemical and corrosion protection as 74-HF</li> <li>Heat resistance of 250°F/121°C for immersion and 350°F/176°C for dry heat</li> <li>Premium option when temperature and pressure concerns are not as great</li> <li>Cost effective</li> </ul>	<ul> <li>Chemical and temperature protection up to 450°F/232°C</li> <li>Surface Tolerant</li> <li>May be used as primer or DTM</li> <li>Hot application up to 400°F/204°C</li> <li>Excellent option for CUI Services up to 300°F/149°C.</li> </ul>

#### 828-265-2513

# HIGHLAND CHEM-TEMP COATINGS AND SPECIFICATIONS

#### СНЕМ-ТЕМР

CODE	VEHICLE TYPE	DESCRIPTION	TEMP. RANGE	# OF COATS	DFT MILS	VOL. SOLIDS	НОТ АРР
74-HF	Hybrid Epoxy Novolac	Chem-Temp 74-HF Series Liner Coating is a 2-K DTM coating that offers exceptional temperature and chemical protection. Specifically formulated for tank linings, vessels, and pipelines, it provides superior barrier properties against acidic, caustic, high pressure and high heat environments. Chem-Temp 74-HF Series also offers excellent adhesion and corrosion resistance for CUI Services. It is a 4:1 mixing ratio and has a 3 hour pot life at 77°F/25°C and may be force cured for a quick return to service.	300 -350°F/ 149-176°C for immersion & 450°F/232°C for dry heat	2	10 - 18	70%	Up to 300°F 149°C
74-AR	Hybrid Epoxy Novolac	Chem-Temp 74-AR Series Liner Coating is a 3-K DTM coating providing the same chemical, temperature and pressure resistance as 74-HF with added abrasion resistance. Specifically formulated for tank linings, vessels, and pipelines, it provides superior barrier properties against acidic, caustic, and high heat environments. It is a 4:1 mixing ratio + an abrasion resistant additive. It has a 3 hour pot life at 77°F/25°C and may be force cured for a quick return to service.	300°F/149°C for immersion & 450°F/232°C for dry heat	2	10 - 18	72%	Up to 300°F 149°C
74-IS	Hybrid Epoxy Novolac	Chem-Temp 74-IS Series Liner Coating is a 2-K DTM coating that was specifically formulated for In Situ application, and/or where a low temperature cure is required. It provides superior barrier properties against acidic, caustic and high heat environments and also offers excellent adhesion and corrosion resistance. 74-IS is supplied as a 1:1 mixing ratio and has a 5 hour pot life at 60°F/15°C.	250°F/121°C for immersion & 350°F/176°C for dry heat	2-4	10 - 16	74%	No
67	Hybrid Epoxy Novolac	Chem-Temp 67 Series Liner Coating is a cost effective 2-K coating offering all of the chemical and corrosion resistance of 74-HF Series but should be used where temperature and pressure concerns are not as great. It offers exceptional heat resistance up to 250°F/121°C for immersion and 350°F/176°C for dry heat. 67 Series is a 4:1 mixing ratio and has a 3 hour pot life at 77°F/25°C and may be force cured for a quick return to service.	250°F/121°C for immersion & 350°F/176°C for dry heat	2	10 - 18	70%	No
47	Hybrid Epoxy Novolac	Chem-Temp 47 Series Primer/DTM Coating is a high-build 2-K coating specifically formulated to provide exceptional chemical and temperature protection up to 450°F/232°C. It is surface tolerant and may be applied over marginally prepared surfaces. It is an excellent choice for baghouse interiors or as a primer where chemical and temperature concerns are high. It is a 4:1 mixing ratio and has a 3 hour pot life at 77°F/25°C.	450°F/232°C	1-2	4 - 16	70%	Up to 300°F 149°C

## SYSTEM PERFORMANCE DATA

#### 74-HF Series Hybrid Epoxy Novolac DTM Liner Coating Adhesion > 1800 psi

(ASTM D 4541) - Commercial Blast			
Abrasion Resistance (ASTM D 4060)	Excellent—124 mg loss 1000 Cycles, 1000g load		
Humidity Resistance (ASTM 4585)	Excellent—No blistering or other defects observed 3000 hours		
Salt Spray Resistance (ASTM B 117)	Excellent—<1mm creep from scribe, no blistering 3000 hours		
Chemical Resistance (ASTM D 1308)	Excellent— MEK—No defects observed 25% H2SO4—slight loss of gloss, no other defects observed		
Pencil Hardness (ASTM D 3363	6H		
Elongation (ASTM D 522)	5%		

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