

Technical Data Sheet

DESCRIPTION AND RECOMMENDED USES: 100% solids, **Dura-Coat Krete-Chemical 870** is a solvent free, high functionality Novolac Epoxy coating ambient-temperature curing. It is designed particularly as protection coating for concrete highly aggressive chemical immersion and spills service **Dura-Coat Krete-Chemical 870** is convenient-to-use, non-sagging with excellent high mechanical strength.

- It can be applied up to 40 mils without slump
- Ideally suited for concrete protection for corrosion
- Suitable for and abrasion protection
- Suitable for immersion and non-immersion service.



Application Areas:

- ✓ Secondary containment
- ✓ Sumps
- ✓ Drains
- ✓ Pits
- ✓ Chemical tanks
- ✓ Pump base
- ✓ Chemical processing floors
- ✓ Neutralization tanks
- ✓ Concrete walls
- ✓ Concrete channels
- ✓ Equipment bases

TECHNICAL DATA

Maximum Temperature (Dependent on service)	Wet Service	65°C	149°F
	Intermittent Service	85°C	185°F
Chemical Resistance	Water	Excellent	
	Alkalis	Excellent	
	Inorganic Acids	Excellent	
	Organic Acids	Excellent	
	Organic Solvents	Excellent	
Flexural Strength	(ASTM D 790)	620 kg/cm ² (60.7 MPa)	8,800 psi
Pull-Off Adhesion	(ASTM D 4541)	330 kg/cm ² (32.4 MPa)	4,700 psi
Tensile Strength	(ASTM D 638)	211 kg/cm ² (20.7 MPa)	3,000 psi
Flexural Modulus	(ASTM D 790)	6.9 x 10 ⁴ kg/cm ²	9.9 x 10 ⁵ psi
Shore D Durometer Hardness	(ASTM D 2240)	80	
Taber Abrasion CS-10, 1000g, 1000 Cycles	(ASTM D 4060)	35mg	
Pot life		35 MIN / KG at 72°F	
Vertical SAG Resistance at 21C (70F) and 1mm (40mils)		No sag	
Coverage for 10Kg kit	76sf @40mils	7.1m ² @1mm	
Mix Ratio	1:1 by Weight		Base: Activator
Color	Grey as standard. Blue and Red optional. Other colors contact the manufacture		
Shelf life (unopened containers)	3 Years at 55-95°F (13-35°C)		



Dura-Coat Krete-Chemical 870

Surface Preparation

Proper surface preparation is critically important for the long-term performance of the Dura-Coat Krete-Chemical 870. The prepared concrete surface must be structurally sound, free from all contaminants and roughened to an >ICRI CSP 3 profile (similar to #60 grit sandpaper). If using with Dura-Coat Krete-Seal 800, surface may be damp, but not wet i.e. no free-standing water. Dura-Coat Krete-Chemical 870 can be applied on damp concrete without using Dura-Coat Krete-Seal 800. A vapor barrier (Krete-Seal 800) is required for slab on grade application. If no vapor barrier is present, check for vapor transmission.

Surface Cleaning & Profiling Methods

Hydro-Blasting Scarifying
Steel Shot-Blasting Dry Abrasive Blasting

Mixing

Thoroughly mix Activator into Base with mixing stick or drill with low speed mixing blade scraping sides and bottom of container or mixing board. Mix by Weight 1-part Base to 1-part Activator. Mix thoroughly to produce an even colored and streak-free material.

THINNING: Never thin.

Application

Application temperature range 10°C (50°F)-32°C (90°F) (substrate).

Dura-Coat Krete-Chemical 870 may be applied by notched squeegee, spray system, brush, or roller.

Brush: medium to stiff bristle of sufficient quality that bristles do not pull out and stick in coating (epoxy glued bristles are best). Trim or tape to <1" nap.

Roller: use good quality 1/8" nap.

For maximum protection against immersion or spills, a 2-coat system is recommended.

To avoid sagging on vertical surfaces the maximum wet film thickness should be between 500 µm-1000 µm (20-40 mil) per coat

Curing Schedule

	16°C (60°F)	25°C (77°F)	32°C (90°F)
Tack Free	4 hrs.	2 hrs.	1 hr.
Light Load	12 hrs.	6 hrs.	3 hrs.
Overcoat End	16 hrs.	10 hrs.	5 hrs.
Full Load	24 hrs.	12 hrs.	6 hrs.
Full Chemical	48 hrs.	24 hrs.	12 hrs.

Clean Up

Use commercial solvents (Acetone, Xylene, Alcohol, Methyl Ethyl Ketone) to clean tools immediately after use. Once cured, the material would have to be abraded off.

Safety

Before using any products, review the appropriate Safety Data Sheet (SDS) or Safety Sheet for your area. Follow standard confined space entry and work procedures, if appropriate.

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