Dura-Coat Chemical 200

Technical Data Sheet

DESCRIPTION AND RECOMMENDED USES: 100% solids, **Dura-Coat Chemical 200** is a solvent free, high functionality Novolac Epoxy ceramic filled coating designed particularly as a protective coating for metals in highly aggressive chemical environments especially high wear abrasion. Excellent in a wide array of caustics and acids. **Dura-Coat Chemical 200** can be easily applied by brush or roller up to 40 mils without slump.

- It can be applied up to 40 mils without slump
- Suitable for any substrate, steel, bronze, aluminum, concrete
- Suitable for corrosion and abrasion protection

Application Areas:

✓Chimneys	✓Heat exchangers	✓Pump cases	✓Impellers
✓Exaust gas ducts	✓Fans and housings	✓Tank linings	✓Metallic structures
✓Scrubbers	✓Valves	✓Many others	

TECHNICAL DATA

Maximum Temperature (Dependent on service)	Wet Service Dry Service	50°C 60°C	122°F 140°F
Chemical Resistance	Water Alkalis Inorganic Acids Organic Acids Organic Solvents	Excellent Excellent Excellent Excellent Excellent	
Flexural Strength	(ASTM D 790)	620 kg/cm2 (60.7 MPa)	8,800 psi
Pull-Off Adhesion	(ASTM D 4541)	330 kg/cm2 (32.4 MPa)	4,700 psi
Tensile Strength	(ASTM D 638)	211 kg/cm2 (20.7 MPa)	3,000 psi
Flexural Modulus	(ASTM D 790)	6.9 x 10^4 kg/cm2	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 72ºF	
Vertical SAG Resistance at 21C (70F) and 1mm (40mils)		No sag	
Coverage for 10Kg kit	154sf @20mils	14.3m2 @500 micron	
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 55-95ºF (13-35ºC)		

Application Sheet

Surface Preparation
Proper surface preparation is critical to the long-term performance of this product. The exact requirements for surface preparation vary with the severity of the application, expected service life, and the initial substrate conditions. All sharp edges and welds shall be ground smooth or to a 3 mm (120 mil) radius before abrasive blasting. Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75-125 µm (3-5 mil). This is normally achieved by initial cleaning and degreasing and then abrasive blasting to a cleanliness of White Metal (SSPC-SP10) or Near White Metal, followed by removal of residual abrasive blast residues from the surface to be coated.

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-parts Base to 1-part Activator. Mix thoroughly to produce an even colored and streak-free material. **THINNING: Never thin**.

Application
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.

Application Temperature: Keep between 55 to 95ºF (17 to 35ºC). Substrate: keep between 45 to 105ºF (7 to 40ºC). the difference in temperature of the substrate and the material should never exceed 10ºF, 5ºC. Substrate shall be a minimum of 5ºF (3ºC) above dew point. Do not apply if relative humidity exceeds 90%. If necessary, heat the metal prior to surface preparation using electric heater or heat lamp. Never use gas, oil or kerosene heaters as they will leave a greasy residue on metal surface. For best results keep all material in warm area overnight (75ºF+) for ease of mixing.

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.