

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
- ✓ Exhaust 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/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	154sf @20mils	14.3m ² @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 55-95°F (13-35°C)		

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 95°F (17 to 35°C). Substrate: keep between 45 to 105°F (7 to 40°C). the difference in temperature of the substrate and the material should never exceed 10°F, 5°C. Substrate shall be a minimum of 5°F (3°C) 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 (75°F+) 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.

Manufacturer, Dura-Coat Industrial Inc., makes no warranty either expressed or implied including warranties of merchantability or fitness for a particular purpose for this product. Under no circumstances will the manufacturer be liable for incidental, consequential, or other damages, breach of warranty, strict liability, or any other theory arising out of use of this product. The information and/or recommendations contained herein are based on standard Product and are proprietary and furnished solely for the use of our customers. This information is provided in good faith and believed to be true and accurate as of the date/version of this document. As the manufacturer has no control over the use conditions or application process of the parties using this product, the manufacturer cannot accept responsibility for loss, injury or other damages resulting from the use of the Product or this or any other information provided by the manufacturer. Therefore, no guarantees of any kind, expressed or implied, are made by the manufacturer, Dura-Coat Industrial Inc., regarding this, or any, product manufactured by them or any contracted or licensed manufacturer. DURA-COAT® epoxy products do not provide structural integrity or improvement. They are only used to provide protection from corrosion, wear, abrasion and chemical attack on a given substrate and only to the extent provided for in the Data Sheets, Technical Data Sheets, Safety Data Sheets, and any other information as supplied in writing directly from manufacturers technical support.