



DURA-COAT ARMOR 320

DESCRIPTION AND RECOMMENDED USES

Dura-Coat® Armor 320 is a ceramic-filled epoxy coating, 100% solids and solvent-free, developed for the protection of metal substrates exposed to highly aggressive industrial environments, particularly under conditions of severe abrasive wear and high impact. It offers excellent chemical resistance to a wide range of acidic and caustic solutions. The material can be easily applied using a plastic spatula or putty knife, achieving thicknesses of up to 1000 mils per coat without sagging.

- It can be applied up to 1000 mils without slump
- Suitable for any substrate, steel, bronze, aluminum, concrete
- Suitable for corrosion and abrasion protection
- Designed for rebuilding worn parts

PACKAGES

	SIZE	REORDER #
OPTIONS	1kg	320-01
	2kg	320-02
	10kg	320-10
	20kg	320-20

APPLICATION AREAS

- Bins
- Chutes and hoppers
- Coal crushers
- Fans and housings
- Impellers
- Pipe elbows
- Propellers
- Pump cases
- Screw conveyors
- Wear plates
- Many others

TECHNICAL DATA

Maximum Temperature (dependent on service)	Wet Service	72°C	161°F
	Dry Service	95°C	203°F
Chemical Resistance	Water	Excellent	
	Alkalis	Excellent	
	Inorganic Acids	Good	
	Organic Acids	Good	
	Organic Solvents	Good	
Solids by Volume		100%	
Viscosity		Pasty	
Mixed Density		2.0	
Shore D Durometer Hardness	(ASTM D 2240)	85	
Pot Life		30 min / kg at 72°F	
Vertical SAG Resistance at 21°C (70°F) and 12.7mm (500mils)		No sag	
Coverage for 10kg Kit	17.2sf@120mils	1.6m²@3mm	
Mix Ratio	2:1 by weight		Base: Activator
Color	Gray as standard. Blue and red optional. Other colors contact the manufacture		
Shelf Life (unopened containers)	3 years at 55-95°F (13-35°C)		



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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. Minimum preparation is mechanical preparation St2/St3. 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 Near White Metal (Sa.21/2), 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 2-parts Base to 1-part Activator. Mix thoroughly to produce an even colored and streak-free material. **THINNING:** Never thin.

CURED TIME

	16°C (60°F)	25°C (77°F)	32°C (90°F)
TACK FREE	4 hours	2 hours	1 hour
LIGHT LOAD	12 hours	6 hours	3 hours
OVERCOAT END	16 hours	10 hours	5 hours
FULL LOAD	24 hours	12 hours	6 hours
FULL CHEMICAL	48 hours	24 hours	12 hours

APPLICATION

Use heavy plastic squeegee or putty knife to apply a 3 mm minimum thickness. Work material into profile of substrate to achieve maximum adhesive and to remove any entrapped air. Contour to correct form with putty knife or plastic applicator. If mold or form is used be sure to coat its surface with a release agent to prevent adhesion of the material.

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.

CLEAN UP

Tools must be immediately cleaned after usage by using industrial alkaline detergent.

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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