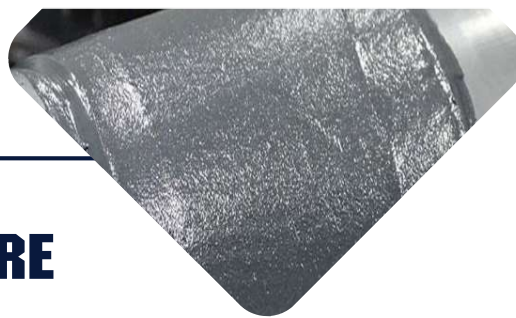




# DURA-COAT HIGH TEMPERATURE STRUCTURAL PUTTY 2000

## DESCRIPTION AND RECOMMENDED USES

Dura-Coat High Temperature Structural Putty 2000, with 100% solids, is a high-functionality, solvent-free Novolac epoxy coating that cures at ambient temperature. It is specifically designed as a rebuilding material for metals in immersion service under highly aggressive chemical and high-temperature environments. Dura-Coat High Temperature Structural Putty 2000 is easy to use, non-sagging, and provides excellent high-temperature resistance and high mechanical strength. It can withstand up to 230°C in continuous operation and up to 280°C intermittently.

- Can be applied in thicknesses of up to 500 mils without sagging
- Ideally suited as a coating material for restoration against corrosion
- Suitable for protection against corrosion and abrasion
- Suitable for immersion and non-immersion service

## PACKAGES

|         | SIZE | REORDER # |
|---------|------|-----------|
| OPTIONS | 1kg  | 2000-01   |
|         | 2kg  | 2000-02   |
|         | 10kg | 2000-10   |
|         | 18kg | 2000-18   |

## FDA COMPLIANCE

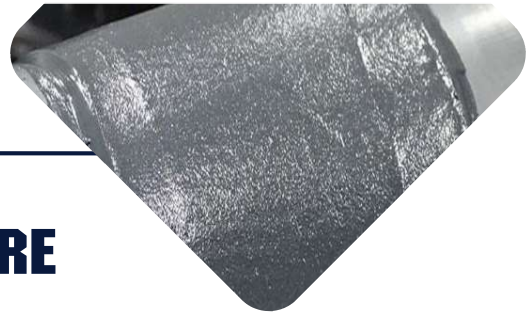
This product complies with FDA regulations for direct food contact, specifically FDA 21 CFR 175.300 and FDA 21 CFR 175.105.

## APPLICATION AREAS

- Metal structures
- Chemical storage tanks
- Fans and housings
- Heat exchangers
- Ducts
- Power plant
- Tank linings
- Mixing areas
- Scrubbers
- Leak in hot oil pipeline

## TECHNICAL DATA

|                                                         |                                                                                |                        |                 |
|---------------------------------------------------------|--------------------------------------------------------------------------------|------------------------|-----------------|
| Maximum Temperature (dependent on service)              | Wet Service                                                                    | 230°C                  | 446°F           |
|                                                         | Dry Service                                                                    | 280°C                  | 536°F           |
| Chemical Resistance                                     | Water                                                                          | Excellent              |                 |
|                                                         | Alkalis                                                                        | Excellent              |                 |
|                                                         | Inorganic Acids                                                                | Excellent              |                 |
|                                                         | Organic Acids                                                                  | Excellent              |                 |
|                                                         | Organic Solvents                                                               | Excellent              |                 |
| Solids by Volume                                        |                                                                                | 100%                   |                 |
| Viscosity                                               |                                                                                | Paste                  |                 |
| Mixed Density                                           |                                                                                | 1.8                    |                 |
| Shore D Durometer Hardness                              | (ASTM D 2240)                                                                  | 85                     |                 |
| Pot Life                                                |                                                                                | 60 min / kg at 72°F    |                 |
| Vertical SAG Resistance at 21°C (70°F) and 12 mm (1/2") |                                                                                | No sag                 |                 |
| Coverage for 10kg Kit                                   | 60sf@40mils                                                                    | 5.6m <sup>2</sup> @1mm |                 |
| Mix Ratio                                               | 2:1 by weight                                                                  |                        | Base: Activator |
| Color                                                   | Gray as standard. Blue and red optional. Other colors contact the manufacturer |                        |                 |
| Shelf Life (unopened containers)                        | 3 years at 55-95°F (13-35°C)                                                   |                        |                 |



# DURA-COAT HIGH TEMPERATURE STRUCTURAL PUTTY 2000

## SURFACE PREPARATION

Proper surface preparation is critical to the long-term performance of this product. The exact requirements for surface preparation vary depending on the severity of the application, the expected service life, and the initial condition of the substrate. The minimum preparation is mechanical preparation St2/St3. The optimum preparation will provide a surface completely free of all contaminants and with a rough angular profile between 75–125 µm (3–5 mils). This is normally achieved through initial cleaning and degreasing, followed by abrasive blasting to a near-white metal finish (Sa 2 ½), and finally removing any remaining abrasive residues from the surface to be coated.

## MIXING

Thoroughly mix the Activator into the Base using a mixing stick or a low-speed drill with a mixing paddle, scraping the sides and bottom of the container or mixing board. Mix at a ratio of 2 parts Base to 1 part Activator by weight. Mix well until a uniform, streak-free material is obtained.

**THINNING:** Never thin.

## CURED TIME

For enhanced performance, post-cure for 2 hours at 80°C (176°F) and 3 hours at 150°C (302°F).

|                      | 16°C (60°F) | 25°C (77°F) | 32°C (90°F) |
|----------------------|-------------|-------------|-------------|
| <b>TACK FREE</b>     | 1,5 hours   | 1 hour      | 45 min.     |
| <b>LIGHT LOAD</b>    | 3 hours     | 2 hours     | 1,5 hours   |
| <b>OVERCOAT END</b>  | 3 hours     | 2 hours     | 1,5 hours   |
| <b>FULL LOAD</b>     | 12 hours    | 6 hours     | 4 hours     |
| <b>FULL CHEMICAL</b> | 36 hours    | 24 hours    | 18 hours    |

## APPLICATION

Use a sturdy plastic spatula or a putty knife. Work the material into the substrate profile to achieve maximum adhesion and eliminate any entrapped air. Shape to the correct form with the putty knife or plastic applicator. If using a mold or form, coat its surface with a release agent to prevent the material from sticking. Machining can be carried out using carbide-tipped tools. Sanding is possible if performed within 14 hours after application at 25°C (77°F) (add 1½ hours for every 10°F below 77°F and subtract 1 hour for every 10°F above 77°F). Large holes and cracks may be reinforced with fiberglass cloth or metal.

## APPLICATION TEMPERATURE

Keep the temperature between 55 and 95°F (17 to 35°C). The substrate must be maintained between 45 and 105°F (7 to 40°C). The temperature difference between the substrate and the material should never exceed 10°F (5°C). The substrate shall be at least 5°F (3°C) above the dew point. Do not apply if the relative humidity exceeds 90%. If necessary, heat the metal prior to surface preparation using an electric heater or heat lamp. Never use gas, oil, or kerosene heaters, as they will leave an oily residue on the metal surface. For best results, keep all material in a heated area overnight (above 75°F) to facilitate 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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