

Technical Data Sheet

DUPAC[®]-2006

Product Description

DUPAC[®]-2006 is a two-components, high cross linking density, solvent-free phenolic epoxy anti-corrosion coating material, which is used in the repair of TAFF serials FBE coating.

Recommended Use

DUPAC[®]-2006 can be used as a repair material FBE coating, which coating thickness can be reached 625-1000um by one pass application.

DUPAC[®]-2006 can also be used as internal coating for steel pipe, vessel and storage tanks. The material has excellent chemical resistance, which can tolerate high temperature chemical immersion including in sour crude oil.

Service temperature: Maximum, dry exposure only@150°C/302°F, wet exposure only @120°C/250°F.

Film Thickness and Spreading Rate

| | Minimum | Maximum | Typical |
|---|---------|---------|---------|
| Dry Film Thickness, μm | 375 | 1000 | 625 |
| Wet Film Thickness, μm | 375 | 1000 | 625 |
| Theoretical Spreading Rate, m ² /L | 2.7 | 1.0 | 1.6 |

Material Properties

| | Typical Value | Test Method |
|------------------|---------------|-------------|
| Color | Blue Green | Visual |
| Density, g/cm³ | 1.5±0.1 | ISO 8130-2 |
| Volatile Content | 100% | ASTM D2697 |



Coating Properties

| | Typical Value | Test Method | | |
|---|-------------------------------|-------------------|--|--|
| Appearance | Smooth surface, uniform color | Visual | | |
| Hardness | 2Н | ASTM D3363 | | |
| Adhesion, MPa | 20 | ISO 4624 | | |
| Flexibility, 3.0°, 25°C | No crack | NACE RP0394 | | |
| Impact Resistance, J | 18 | ASTM G14 | | |
| Resistance to abrasion (1000g, 1000r, CS17 wheel), mg | 65 | ASTM D4040 | | |
| Hot Water Immersion, 95°C, 37days | Coating intact Rating 1 | ISO 2812-2 | | |
| Chemical resistance (ordinary temperature, 90d) | | | | |
| 10% NaOH | No change | ASTM G20 | | |
| 10% H ₂ SO4 | No change | ASTM G20 | | |
| 3% NaCl | No change | ASTM G20 | | |
| Autoclave | | | | |
| (Temperature:100ºC/212ºF, | Rating 1 | NACE TM 0185-2006 | | |
| Pressure: 3667 psi/25 MPa , | | | | |
| 3%NaCl, Duration: 22 days) | | | | |

General Application

- 1. Remove oil, grease, and loosely adhering deposits on substrate;
- 2. Substrate temperature should not be lower than 5°C. Verify the air temperature is 5°F/3°C above the dew point with maximum relative humidity of 80%:
- 3. Abrasive blast clean surface to NACE #2/SSPC-SP10, ISO8501:1 SA-2 1/2, near white metal;
- 4. With air hose, clean blasted surface of any abraded debris then verify anchor profile is 50-85 um;



- 5. Apply Dupac[®]-2006 as soon as possible after blasting but no more than 4 hours;
- 6. Allow to cure per time & temperature chart below;
- 7. Visually or electrically inspect the coating for defects;
- 8. Repair all defects using Dupac[®]-2006 as repair material.

Repair Process

- 1. Remove oil, grease, and loosely adhering deposits;
- 2. Grinding the coating surface with medium grit sandpaper (80 grit) or a grinding wheel; ensure that the surrounding coating is roughened on all sides of the defects;
- 3. Ensure abraded surface is cleaned of any debris with air blast or clean lint free cloth;
- 4. With the substrate above 41°F/5°C, dew point 5°F/3°C below air temperature, apply Dupac[®]-2006.

Application Method

Spraying: Can be applied by heavy-duty, twin-feed, hot, airless spray equipment.

Brushing: Recommended for stripe coating and small areas, care must be taken to achieve the specified dry film thickness.

Application Parameters

| Mix ratio by volume | base : hardener 80:20 (4:1) | | |
|---------------------|---|--|--|
| Pot life (20°C) | Max. 1 hour. (And shall decrease with increasing of temperature) | | |
| Thinner/Cleaner | Special thinner (No thinner should be added) | | |
| | *Heat A part to a temperature of 50-60°C by water bath and keep stirring if the coating material is too sticky to apply. | | |
| Notice | *Due to the short pot life after mixing, spraying nozzle and other equipment components shall be cleaned at once after application. | | |
| | *Appropriate aging (recommended to mix A & B part and lay aside for 10min) shall be taken when apply by brushing. Pot life shall be noticed and the mixture shall be used up within the time. | | |



Drying Time

factors such as ventilation, temperature, thickness, etc. will affect drying times.

The values given in table below are based on the following conditions:

(Well ventilated, specific thickness, single coating on inert substrate)

| Substrate temperature | 10°C | 20°C | 30°C |
|-----------------------|----------|----------|----------|
| Surface dry | 15 hours | 6 hours | 3 hours |
| Hard dry | 30 hours | 16 hours | 12 hours |
| Curing | 7days | 5 days | 3 days |

Note: Coating shall be a better performance in sour service after 60-100 ${\it C}\,$ curing in oven.

Transportation and Storage

The product must be properly sealed, transported and stored to avoid direct sun and rain. Storage should be well ventilated, dry and cool, away from source of fire and living place. Validity of this product shall be within 12 months since manufacturing date.

Health and Safety

Before and during use, observe all safety labels on packaging and paint containers. For detailed information on the health and safety hazards and precautions for use of this product, refer to the Material Safety Data Sheet "MSDS Dupac[®]-2006" and follow all local or national safety regulations.

Use in well ventilated areas. Wear personal protective equipments. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Spillage on the skin should immediately be removed with suitable cleaner, soap and water. Eyes should be well flushed with water and medical attention sought immediately.

Package Size

20L / barrel

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