



Polyguard 6612FE

COAL TAR EPOXY

Product Description: A **Coal Tar Epoxy** is a two-pack coating system that cures to form a tough, flexible, and highly durable surface. It offers superior resistance to seawater, petroleum products, and severe corrosion. With excellent mechanical properties and minimized surface flow resistance, this coating is ideal for heavy-duty applications on steel and concrete surfaces, providing long-lasting protection even in harsh environments.

Typical Uses: Coal Tar Epoxy is perfect for industrial and marine applications, including petroleum storage tanks, dam gates, offshore drilling rigs, and sewage treatment plants. It is an ideal choice for non-potable water tanks, pipelines, structural steel, and other environments exposed to severe corrosion.

- Features:**
- Tough, flexible, and highly durable coating
 - Excellent bio-bacterial and corrosion resistance
 - Withstands severely corrosive and weather-exposed environments
 - Suitable for marine applications and heavy-duty structures
 - Primer-free application for steel and concrete
 - Excellent resistance to water absorption and flow resistance
 - Ideal for use in waste and sewage treatment plants, clarifiers, penstocks, and chain lockers

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|------------------------------|------------------------------|--|----------------------------|------|-------|---|-----------|--------------|----------|-----------|-----------------|--------|----------|----------------------|
| Technical Properties: | Color / Shades | Black & dark Brown | | | | | | | | | | | | |
| | Gloss | Smooth & Glossy | | | | | | | | | | | | |
| | Volume Solids | 65 + 5 % | | | | | | | | | | | | |
| | Mix ratio | 3:1 by volume | | | | | | | | | | | | |
| | Typical Thickness | 75–100 microns [3-4 mils] dry equivalent to 115-154 microns [4.5-6 mils] wet | | | | | | | | | | | | |
| | Coverage | 2.16 m ² /liter at 300 microns DFT (Theoretical). | | | | | | | | | | | | |
| | Flash Point (Typical) | 106°C (223°F) | | | | | | | | | | | | |
| | VOC | < 250 g/L, [2.08 lb/US gal] – EPA Method 24 | | | | | | | | | | | | |
| | Reducer/Thinner | Not Recommended | | | | | | | | | | | | |
| | Cleaner | Thinner C1 | | | | | | | | | | | | |
| | Drying Time | <table><tr><td>Surface Temperature</td><td>25°C</td></tr><tr><td>Touch</td><td>45 to 60 minutes depending on atmospheric temp.</td></tr><tr><td>Stack Dry</td><td>3 to 6 Hours</td></tr><tr><td>Hard Dry</td><td>Overnight</td></tr><tr><td>Cure to Service</td><td>7 Days</td></tr><tr><td>Pot Life</td><td>45 to 60 Mins, mixed</td></tr></table> | Surface Temperature | 25°C | Touch | 45 to 60 minutes depending on atmospheric temp. | Stack Dry | 3 to 6 Hours | Hard Dry | Overnight | Cure to Service | 7 Days | Pot Life | 45 to 60 Mins, mixed |
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The drying times mentioned are based on a dry film thickness of 100 microns (7.0 mils) under standard conditions.



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Surface Preparation: All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504.

Bare Steel:

Cleanliness: Blast cleaning to min. Sa 2 ½ (ISO 85011:2007).

Roughness: Using abrasives suitable to achieve Grade

Medium G (50 - 75 µm, Rz scale) (ISO 8503-2).

Other Surfaces:

The coating may be used on other substrates. Please contact TRPL for more information.

| Application | Application Method | Thinning | Application Parameters |
|-------------|--------------------|----------|--|
| | Spray | NA | Use a heavy-duty multi-component airless hot spray system with a tip pressure of 200 to 220 bar. |
| | Brush and Roller | NA | For stripe coating or small areas, it is crucial to achieve the specified dry film thickness and a uniformly coated surface. |

For brush application, use nylon or polyester bristles. A 3/8" woven roller cover with a solvent-resistant core should be used for roller application.

Note:

- The material is supplied in two containers as a complete unit. Always mix the entire unit in the proportions provided.
- Stir the base thoroughly for optimal results and homogeneity.
- Mixing 3 parts Comp. A (base) is to be mixed thoroughly with 1 part Hardener, Comp.B (curing agent) through an online static mixer, and ensure the paint mix is homogenous before spray. It should be 100 % ionization of spraying film during application on substrates.

Application Conditions

- Substrate temperature must be at least 10°C and 5°C above the dew point of the air to prevent condensation.
- Follow the specified induction time after mixing components to ensure optimal coating adhesion.
- Relative Humidity should be maintained below 85% during application to achieve desired results.
- Regularly measure temperature and humidity in the application area to ensure compliance.
- Ensure adequate ventilation in confined spaces for proper drying and curing.
- Protect the coating from exposure to oil, chemicals, or mechanical stress until it has fully cured.

System Cleaning

Flush thoroughly the application equipment with TRPL cleaning agent TH -8248 prior and after to application.

Pressure at nozzle: 20 - 22 MPa (200 to 220 bar.)

Nozzle tip sizes: 35 to 43 thau depend on production rate.

Spray angle: 90° - 110°

Filters size and cleaning procedure:

Filters should be cleaned, both in the pump and the spray gun after a certain frequency to avoid coating system chock-up and filters' recommended sizes shall be 80 and 100 mesh to smooth and trouble-free operation.



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Paint Transfer Part -A Base and Part-B Hardener shall be Heat indirectly at 65°C to 75°C as well as 55°C to 65°C respectively before application of paint and passing through filter strainers without fail. The coating system shall be cleaned thoroughly after a stoppage in case of a 6 to 8-hour stay.

Additional Notes It is of vital importance that the nozzle and other parts including the static mixer of the spraying equipment are cleaned properly directly after the work is done due to the short pot life high build liquid coal tar epoxy paint.

- The hoses should be used at high temp and pressure of good quality and no longer than necessary.
- Hose length between mixer and gun shall be less than 1.5 meters.
- Preferably store both paint components at 20 - 25°C. Beware that higher storage temperature will shorten the life of the paint.

For stripe/repair coating, however, a lower paint temperature may be favorable, to get a sufficient pot life.

Storage **Shelf Life:** 12 Months, Sealed Condition

Storage Conditions: Store indoors at 4.5°C [40°F] to 38°C [100°F]

The product must be stored in accordance with national regulations. Keep the containers in a cool and dry place and well-ventilated area with no direct source of heat or light. Containers must be kept tightly closed when not in use.

Packing **Metal Barrels**
Base: 15 Liters & 200 Liters
Hardener: 5 Liters & 200 Liters

Safety: Handle with care. Before & during use, observe all safety labels on packaging and paint containers, consult Material Safety Data Sheets, and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin & eyes, and do not swallow. Take precautions against possible risks of fire or explosions as well as protection of the environment. Apply only in well-ventilated areas.

Disclaimer: The information in this document is given to the best of TRPL's knowledge, based on laboratory testing & practical experience. TRPL products are considered semi-finished goods, as such products are often used beyond TRPL's control. TRPL can not guarantee anything but the quality of the product itself. Minor product variations may be implemented to comply with local requirements. TRPL reserves the right to change the given data without further notice. User should always consult TRPL for specific guidance on the general suitability of the product for their needs and specific application practices.