

## Transpoxy Guard 475

**Product code:**  
TO 4.75

A high build polyamine cured epoxy coating for steel and concrete. Transpoxy Guard 475 offers excellent protection under immersion and/or buried conditions and complies to ISO 12944-6 requirements for usage in corrosive conditions Im 2 - very high (Seawater immersion) and Im 3 - very high (Buried).

Transpoxy Guard is especially designed for the protection of potable water tanks made of steel or concrete and is approved according to AS/NZS 4020: 2018. Transpoxy Guard can be applied directly to blast cleaned steel but can also be applied to suitable Transpoxy priming systems. For atmospheric services, Transpoxy Guard can be recoated with all Transocean two-pack Finishing systems or can be left un-coated.

### Physical properties:

|                    |   |
|--------------------|---|
| Colour             | White, Light grey, Redbrown, selected other colours |
| Gloss / Appearance | Gloss   |
| Volume Solids      | Approx. 100 %                                       |
| Specific gravity   | Approx. 1.6 g/ml                                    |
| VOC                | Approx. 23 g/liter                                  |
| Flashpoint         | Base > 25°C Hardener > 80°C                         |

### Usage data:

**Mixing ratio** By volume, base to hardener: 66.7 : 33.3 [2:1]

| <b>Film thickness</b> | Dry film thickness per coat (µm) | Wet film thickness per coat (µm) | Theoretical spreading rate (m <sup>2</sup> /l) |
|-----------------------|----------------------------------|----------------------------------|--|
| Range                 | 150 - 500                        | 150 - 500                        | 6.7 - 2  |
| Recommended           | 200                              | 200                              | 5.0  |

### Curing Times

|               | Substrate temperature |          |            |
|---------------|-----------------------|----------|------------|
|               | 10°C                  | 23°C     | 30°C       |
| Touch dry     | 24 Hours              | 16 Hours | 8 Hours    |
| Dry to handle | 48 Hours              | 24 Hours | 16 Hours   |
| Full cure     | 7 Days                | 5 Days   | 3 Days     |
| Potlife       | 2 Hours               | 1 Hour   | 30 Minutes |

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product and should be considered as guidelines only.

The actual drying time may be shorter or longer, depending on film thickness, temperature, ventilation, humidity, preceding paint system etc.

### Recoating intervals - see application section

| see application section | Substrate temperature |         |          |        |          |        |     |     |
|-------------------------|-----------------------|---------|----------|--------|----------|--------|-----|-----|
|                         | 10°C                  |         | 23°C     |        | 30°C     |        |     |     |
|                         | Min                   | Max     | Min      | Max    | Min      | Max    | Min | Max |
| Recoated with           |                       |         |          |        |          |        |     |     |
| Single pack products    |                       |         |          |        |          |        |     |     |
| 2-pack products         | 36 Hours              | 10 Days | 24 Hours | 4 Days | 16 Hours | 2 Days |     |     |

Recoating information is given for guidance only and is subject to local climate and environmental conditions. Consult your local Transocean representative for specific recommendations.

As a general rule, the best intercoat adhesion is achieved when the subsequent coat is applied before the preceding coat has been fully cured. Extended recoating times should not be considered for other than ambient atmospheric exposure. After prolonged exposure times it may be necessary to roughen the surface to ensure intercoat adhesion.



## Surface Preparation:

### Steel - Blast cleaning

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000.

All edges shall be ground to a minimum radius of 2 mm. Remove weld spatter and smooth weld seams by using disc grinders, chipping hammers or other suitable power tools. Sharp edges, weld seams, corners and other areas that are likely to receive less dry film thickness than specified, should be stripe coated.

The surfaces shall be blast-cleaned to min. Sa 2½ (ISO 8501-1:2007). The surface profile and the anchor pattern shall be between 40 µm and 70 µm. The abrasives shall be free from oil, grease, moisture, chloride contamination etc.

### Coated substrates

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000.

Ensure compatibility of the coated substrates with the selected paint system. If the remaining part of the existing coating system needs to be sweep-blasted, fine abrasive shall be used to avoid damage to the coating system.

When recoating aged coated substrates, damaged areas must be removed back to a firm edge. Light abrade or sweep-blast the surface in order to provide a physical key for adhesion.

When recoating zinc primed products, ensure the primer has been fully cured. Zinc salts products shall be removed by high pressure fresh water cleaning. Contact your local Transocean office for more information.

### Stainless Steel

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000.

Blast cleaning shall be carried out by smooth sweep blasting, using a fine non-iron containing abrasive (e.g. aluminium oxide). The abrasives shall be free from oil, grease, moisture, chloride contamination etc.

Surface roughness shall be in the range of 20 µm to 30 µm.

### Concrete

All surfaces should be clean, dry and free from contamination. The surfaces should be prepared in accordance with NACE No. 6 or SSPC- SP 13. Remove porous and less coherent areas by blast cleaning or by using power tools such as chipping hammers. Remove all dust and debris prior to painting. As a general rule, the moisture content in the substrate should not exceed 4 % (by weight).



## Application:

### Mixing:

The product is supplied in 2 containers as a unit. Always mix a complete unit in the proportions supplied. Do not mix more material than can be used within the specified pot life.

Stir the base (Part A) with a clean mechanical mixer. Then add the entire contents of Curing Agent (Part B) and mix thoroughly. Avoid too vigorous mixing as it leads to in air inclusion, which may result in poor application results.

If thinner is required, only add after mixing of the two components.

Irrespective of the substrate temperature, the advised minimum temperature of the mixed paint is 15 °C. At lower temperatures, more thinner may be required to obtain a proper application viscosity, which may result in lower sag resistance and slower curing.

### Conditions:

Unless mentioned separately, the relative humidity should be below 90% during application and curing. The temperature of the substrate should be min. 5°C and at least 3°C above the dew point of the air. Temperature and relative humidity should be measured in the vicinity of the substrate.

### Methods:

|                                   |                    |                                    |
|-----------------------------------|--------------------|------------------------------------|
| <b>Guiding data Airless spray</b> | Pressure at nozzle | 180 - 250 bar                      |
|                                   | Nozzle size        | 0.53 - 0.58 mm (0.021 - 0.023 in.) |
|                                   | Spray angle        | 40 - 80 degrees                    |
|                                   | Volume of thinner  | Thinning not advised.              |

|                              |                   |                |
|------------------------------|-------------------|----------------|
| <b>Guiding data Airspray</b> | Pressure          | Not applicable |
|                              | Nozzle size       | -              |
|                              | Volume of thinner | -              |

**Brush / Roller** Suitable for stripe coats and touch-up work only.

**Thinner** This is a solvent free product.  
Do not use any thinner except for cleaning equipment. If thinning for the final coat is necessary, ethanol is recommended.

**Cleaner** Transocean Epoxy Thinner 6.03

### Additional usage instructions

For this type of coating it is advised to use a heavy duty single feed airless. Compression 45 : 1, but preferably 60 : 1. Corners, edges and weld seams should be stripe-coated prior to a full coat application.

Allow ventilation during and after application of the coating system. Temperature of the ventilation air should lie between 20°C and 35°C. Continue ventilation until the system has fully cured. Do not apply the coating when ambient temperature will be less than 10°C for more than 48 hours after application of the coating.

After application and full cure of the final coat, the tank should be flushed and cleaned once with a 2-3% lemon acid solution in water. Then the tank should be filled and flushed with clean water.



## **Additional Product information:**

### **Storage and shelf life**

The product must be stored in accordance with national regulations. The cans are to be kept in a dry, cool, well ventilated space and away from source of heat and ignition. Cans must be kept tightly closed and kept in original containers until required for use.

Partly used containers should be re-sealed securely and stored according to the recommended manner. (See section 7 of relevant SDS).

### **Health and safety**

Observe the precautionary notices on the label of the container. A material safety data sheet is available upon request and national or local safety regulations should be followed. This product is intended for use by professional applicators.

As a general rule, avoid skin- and eye contact by wearing overalls, gloves, goggles, mask, etc. Spraying should be carried out under well-ventilated conditions. This product contains flammable materials and should be kept away from sparks and open flames. Smoking in the area should not be permitted. Avoid the inhalation of vapours and particulates by the provisions of good natural ventilation sufficient to keep air-borne concentrations below the Occupational Exposure Standards during the application and drying of paint films.

In operations where natural ventilation is insufficient to achieve this - e.g. painting work in enclosed areas - exposure should be controlled by the use of local exhaust ventilation. When this is not reasonably practicable, suitable respiratory protective equipment must be worn. For spray application or when OES's are likely to be exceeded, use the respiratory equipment as recommended in for instance BS4275:1974. This specification gives advice on selection, use and maintenance of various types of breathing apparatus. Protect other persons in the area.

### **Disclaimer**

The information in this data sheet is provided to the best of our knowledge. However, we have no control over either quality or condition of the substrate and other factors affecting the use and application of this product. Therefore, we cannot accept any liability whatsoever or howsoever arising from the performance of the product or for any loss or damage arising from the use of this product. Users should first carry out their own trials to ascertain the suitability of the product for their intended purpose.

This Data Sheet supersedes all previous Data Sheets supplied to you relating to this product. It contains important information which must be communicated to the user. The user must satisfy himself of the suitability of the product for the intended application and surface, as surface and application conditions are beyond our control. The user must also satisfy himself of the suitability of the product in circumstances other than those set out in this data sheet. The user should also maintain appropriate control procedures. Should further information be required, please contact our Technical Department.

Transocean Coatings employ a policy of continuous development and the technical data could be revised as a result of experience or new information becoming available.

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