

TransTower Alkyd Primer

Product description.

A high build anti-corrosive primer based on a urethane alkyd resin system, pigmented with non toxic pigments, fillers and zinc phosphate with lamellar micaceous iron oxide to improve inter coat adhesion and non slip properties. Designed for use on structural steel, such as transmission towers, tanks, bridges, gantries etc., where high build is a particular requirement.

Complies to EA Technology Specification for Urethane Alkyd Based Two Coat Paint for Overhead Line Towers ,for use by UK Electricity Companies. (Project no 71220) EATL/T67 December 2006.

Physical properties.

Product code	80.44
Colour	Cream
Texture	Flat
Volume Solids	Approx. 48%
Specific gravity	Approx. 1.35 g/ml
VOC	Approx. 378 g/liter
Flashpoint	> 25°C

Usage data

Film thickness	Dry film thickness per coat (µm)	Wet film thickness per coat (µm)	Theoretical spreading rate (m ² /l)
Range			
Recommended	75	160	6.4

Curing Times

Substrate temperature

	10°C	23°C	30°C
Touch dry	6 Hours	4 Hours	2 Hours
Dry to handle	24 Hours	16 Hours	8 Hours
Full cure			

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/times may be shorter or longer, depending on film thickness, temperature, ventilation, humidity, preceding paint system etc.

Recoating intervals - see application section

Substrate temperature

Recoated with	10°C		23°C		30°C	
	Min	Max	Min	Max	Min	Max
Single pack products	12 Hours	Indefinite	8 Hours	Indefinite	6 Hours	Indefinite
2-pack products	-	-	-	-	-	-

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

As a general rule, the best intercoat adhesion is achieved when the subsequent coat is applied before the preceding coat has been fully cured. 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.

Steel - Power-tool Cleaning

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. Power-tool cleaning to St 3 (ISO 8501-1:2007). Care shall be taken to ensure that power-tool cleaning does not polish the steel surface. If the surface being prepared lies adjacent to a coated surface, the power tool cleaning shall overlap the coated surface by at least 25 mm and the coated surface shall be feathered.

Water jetting

Surfaces should be treated in accordance with ISO 8504:2000. All surfaces should be clean, dry and free from contamination. Water jetting in accordance to ISO 8591-4: 2006 to a cleanliness of Wa 2 or better for atmospheric exposure and Wa 2,5 for immersion. Acceptable flash rust degree is M (medium) but degree L (light) is preferred.

A water pressure of at least of 1000 bar (approx. 15.000 psi) is recommended.

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.

Contact your local Transocean office for more information.

Aluminium

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. In case corrosion products are present, they should be removed by light abrading of the surface or by blast cleaning, which 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.

Dependent on the choice of primer, a thin layer of an acid etch primer (Transowash) can be applied to facilitate adhesion of subsequent coats.

Galvanized steel

All surfaces should be clean, dry and free from contamination. Surfaces should be treated in accordance with ISO 8504:2000. So called 'white' zinc corrosion products should be removed by high pressure fresh water cleaning or blast cleaning. 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. Ensure the zinc layer shall not be damaged; a smooth uniform surface roughness shall be achieved. No defects such as break through or crisping of the zinc layer shall occur.

Application.

Mixing

This material is a one pack coating and should always be mixed thoroughly with a clean mechanical mixer before application.

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

The temperature of the substrate should be at least 10°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.

In general, the maximum recommended surface temperature is 40°C. Higher steel temperatures are acceptable provided dry-spray is avoided by proper spray application and extra thinning if required. In extreme cases it may be necessary to reduce film thickness in order to avoid sagging.

When applying the paint in confined spaces, provide adequate ventilation during application and drying. Observe local regulations. Please contact your local Transocean representative for a specific recommendation.

Methods

Guiding data Airless spray	Pressure at nozzle	120 - 150 bar
	Nozzle size	0.38 - 0.53 mm
	Spray angle	40 - 80 degrees
	Volume of thinner	0 - 3%

Guiding data Airspray	Pressure	3 - 5 bar
	Nozzle size	1.2 - 2.0 mm
	Volume of thinner	0 - 10%

Brush / Roller Suitable.

Thinner No use of thinner required.

Cleaner Transocean Alkyd Thinner 6.00

Film thickness.

The paint must be applied as a continuous layer and as close to the specified wet film thickness as possible. Use a wet film thickness gauge to verify that the correct wet film thickness is applied.

Over application, excessive thinning, wrong application techniques etc. may lead to runs and sagging of the paint. When the paint is still wet, such effects can be rectified by brushing out the defected areas.

When the defect is noticed after curing of the paint, repair the affected areas by disc sanding to an even smooth surface and apply an additional coat of paint.

Additional usage instructions

Due to high volume solids of this primer which are in accord with the 1991 National Grid specifications, and also widely varying application conditions e.g. different ambient temperatures, wind velocities, contractor application techniques and losses etc., practical spreading rates will differ from theoretical rates given above. Dependent on applied film thickness, the practical spreading rates will generally fall in the range of 3 - 4 sq. metres per litre.

For maximum corrosion resistance, it is recommended to apply 1 coat of TransTower Alkyd Primer to a dry film thickness of 60 microns, followed by a coat of TransTower Alkyd Finish to a dry film thickness of 90 microns.

When applied the Primer and Finish should give a total minimum dry film thickness of 150 microns.

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 MSDS).

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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