Transurethane Finish HB

Product code:
TO 3.44

A polyurethane topcoat with excellent gloss and colour retention. It offers a tough, durable coating with good resistance against the spillage of oils and chemicals. It can be applied at a dry film thickness up to 100 micron in a single coat without affecting gloss properties. It can be applied direct to various metals for protection in a mild industrial environment.

Physical properties:

Colour	Transocean Colourshades
Gloss / Appearance	Gloss
Volume Solids	Approx. 58 %
Specific gravity	Approx. 1.3 g/ml
VOC	Approx. 387 g/liter
Flashpoint	Base > 25°C Hardener > 40°C

Usage data:

Mixing ratio By volume, base to hardener: 5:1

Film thickness	Dry film thickness per coat (µm)	Wet film thickness per coat (µm)	Theoretical spreading rate (m^2/l)
Range	40 - 100	70 - 170	14.5 - 5.8
Recommended	70	120	8.3

Curing Times	Substrate temperature			
	10°C	23°C	30°C	40°C
Touch dry	4 Hours	1 Hour	30 Minutes	20 Minutes
Dry to handle	18 Hours	8 Hours	6 Hours	4 Hours
Full cure	10 Days	7 Days	5 Days	3 Days
Potlife	16 Hours	8 Hours	4 Hours	2 Hours

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

	Substrate temperature							
	10°C		23°C		30°C		40°C	
Recoated with	Min	Max	Min	Max	Min	Max	Min	Max
Single pack products								
2-pack products	18 Hours	Indefinite	8 Hours	Indefinite	6 Hours	Indefinite	4 Hour	Indefinite

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.

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:

Guiding data Airless spray	Pressure at nozzle	120 - 150 bar
	Nozzle size	0.38 - 0.43 mm (0.015 - 0.017 in.)
	Spray angle	40 - 80 degrees
	Volume of thinner	0 - 3%
Guiding data Airspray	Pressure	4 - 5 bar
	Nozzle size	1.2 - 1.8 mm
	Volume of thinner	5 - 10%
Brush / Roller	Suitable. Volume of thinner: 0 - 5%.	
Thinner	Transocean PU Thinner 6.04 If thinning is necessary, this should be added after mixing of the two components. The recommended level of thinner is dependent on thickness and conditions. In certain circumstances, it may be required to exceed the stated level of thinner. However, as a general rule do avoid excessive thinning as it will result in lower sag resistance and slower cure. In addition it may cause solvent entrapment, possibly risking blistering, pinholing and/or other coating defects.	
Cleaner	Transocean PU Thinner 6.04	

Additional usage instructions

Note to metallic colourshades.

The appearance of metallic colourshades in general will be dependent on application method, conditions, thickness, substrate type etc. For this reason, metallic shades cannot be made exactly according to colour code standards such as RAL, BS.
For more information, contact your local Transocean representative please.

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 that 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.

Print Date	4-11-2024