



# Product Data Sheet

## Transpoxy Masterbond 4.77

### Product description.

High solids epoxy coating formulated with Masterbond binder technology. Transpoxy Masterbond offers excellent anticorrosive properties and has good adhesion to St3 prepared steel substrates. The product is flexible and compatible with most aged coating systems. The product cures down to temperatures of -10°C. Approved for grain carriage by Newcastle Occupational Health Agency.

### Physical properties.

Colour / Texture                      Redbrown and Grey / Semi-gloss  
 Volume Solids                         82%  
 Specific gravity                        1.35 gr/ml  
 VOC                                        166 gr/litre  
 Flashpoint                              >25°C

	Dry film thickness per coat (μ)	Wet film thickness per coat (μ)	Theoretical spreading rate (m <sup>2</sup> /l)
Range	100 – 300	120 – 365	8.0 – 2.7
Recommended	150	185	5.4

### Application data.

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

Pot-life                                      -5°C: 8 hours,     10°C: 4 hours,     23°C: 2 hours.

Guiding data - Airless spray     Pressure at nozzle: 180 – 250 bar. Nozzle size: 0.41 - 0.58 mm.  
 Spray angle: 40 - 80 degrees. Volume of thinner: 0 - 5%.

Brush / Roller                            Suitable but airless spray is recommended. Multiple coats are required to achieve the specified dry film thickness. Volume of thinner: 0 - 10%.

Thinner / Cleaner                        Transocean Epoxy Thinner 6.03.  
 If thinning is necessary, this should be added after mixing of the two Components. Avoid excessive thinning as it will result in lower sag resistance and slower cure.

### Drying and recoating times.

Substrate temperature	Touch dry	Dry to handle	Full cure	Dry to recoat (2)		
				Minimum	Maximum with 1-pack.	Maximum with 2-pack
-5 °C	24 hours	48 hours	30 days	48 hours	15 days	Indefinite
5 °C	8 hours	20 hours	21 days	20 hours	10 days	Indefinite
10 °C	6 hours	18 hours	14 days	18 hours	10 days	Indefinite
23 °C	3 hours	12 hours	7 days	12 hours	10 days	Indefinite

(1) The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, preceding paint system etc

(2) The surface should be dry and free from ice, grease and other contaminants prior to overcoating. The best intercoat adhesion is achieved when the subsequent coat is applied before the preceding coat is fully cured. After prolonged exposure or when maximum recoating time has exceeded it may be necessary to roughen the surface to ensure intercoat adhesion. When in doubt, consult your nearest Transocean office.

**Surface preparation.**

Steel	Oil and grease should be removed by solvent cleaning according to SSPC-SP1. Remove weld spatter and smooth weld seams and sharp edges as applicable. Abrasive blasting: min. Sa2 – ISO 8501:1. Apply Transpoxy Masterbond 4.77 immediately after the steel has been blasted and the quality of preparation has been approved. Hydroblasting: DW-3 according to STG-2222. Water pressure > 1000 bar (or 15000 psi) Power tool cleaning: min. ISO-St3. Please note that better surface preparation always results in longer lifetime expectations.
Repair	Existing systems should be roughened and dry and free from loose paint, salt, ice, grease and other contaminants prior to overcoating. Corroded and/or damaged areas should be power tool cleaned to ISO-St2 or better, blast cleaned to ISO-Sa2 or Hydroblasted to DW 2-3.

**Recommended paint system.**

A typical system for application at temperatures down to -5°C is shown below.

Transpoxy Masterbond 4.77                                  2 x 150 µ dft.

The coating can be left uncoated but may be recoated with Transpoxy, Transurethane, Transuniprene or Transunilac Finishes.

**Application conditions.**

The temperature of the substrate should be at least 3°C above the dew point of the air. Temperature and relative humidity should be measured in the vicinity of the substrate.

The maximum recommended surface temperature is approx. 40°C

When applying the paint in confined spaces, provide adequate ventilation during application and drying.

The temperature of the mixed paint should be at least 15°C, otherwise extra solvent may be required to obtain a proper application viscosity.

**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.

**Worldwide availability**

The product is part of the common Transocean product range but local availability is subject to confirmation. Although we strive to supply the same product through the world, slight modifications of the product in some cases may be necessary in order to comply with local conditions and/or national regulations. In such cases an alternative datasheet will be issued.

**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.

**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. We reserve the right to change the product without notice.*

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