



CODE: 375001

REVISION: 04

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EPICON T-500

Product Description

EPICON T-500 is an anti-corrosive coating based on epoxy resin (Food Grade Epoxy). The coating provides excellent physical properties such as adhesion, toughness, abrasion resistance, chemical resistance and is also resistant to fresh water, petroleum products, crude oil, alkalis and weak acids.

This product is suitable for protection of tank interiors and is IMO PSPC type approved for COT.

Airless spray can build a dry film thickness of 70 - 160 microns per coat.

Product Information

Type	Epoxy coating					
Recommended Use	For use in product carrier tanks, crude oil tanks, chemical tanks, cargo holds, drinking/potable water tanks, fresh water tanks, distilled water tanks, etc.					
Mixing Ratio	Base : Hardener = 78 : 22 (by volume)					
Colour	Red Brown, Grey, Light Grey, White					
Flash Point	Base : 17.7°C Hardener : 15.5°C					
Density	1.39 G/ml					
Volume Solids (VS)	58 ± 2 %					
VOC	403 G/l (EPA Method 24)					
Coverage (Theoretical)	8.26 - 3.62 m ² /l					
Wet Film Thickness	121 – 276 μm					
Dry Film Thickness	70 – 160 μm					
Drying Time (at D.F.T. 125 μm)	Temperature	5°C	10°C	20°C	30°C	40°C
	Surface Dry	3.5 hrs	2.5 hrs	1.5 hrs	30 mins	15 mins
	Hard Dry	36 hrs	24 hrs	12 hrs	6 hrs	4 hrs
Painting Interval (at D.F.T. 125 μm)	Minimum	36 hrs	24 hrs	12 (16) hrs	6 (14) hrs	4 (8) hrs
	Maximum*	28 days	28 days	21 days	14 days	10 days
	Maximum**	10 days	10 days	7 days	5 days	3 days
Pot Life		10 hrs	7 hrs	5 hrs	3 hrs	1.5 hrs
Induction Time		30 mins	30 mins	20 mins	10 mins	-
Thinner	Epoxy Thinner					
Method of Application	Airless spray, Roller, Brush					
Condition of Application	Temperature	: Minimum 5 (10)°C				
	Humidity	: Maximum 85% R.H.				
	Surface Temperature	: At least 5°C above dew point***				
	For Airless spray:					
	Tip No.	: GRACO 619, 621, 623				
	Paint Output Pressure	: 14.7 - 17.7 MPa				
	Spray Speed	: 60 - 80 cm/sec				
	Viscosity	: 1.0 - 1.8 Pa·s				
	Thinning	: 0 - 10 % by volume				



Product Information (continued)

Recommended Surface Preparation	New building: Dependent on yard procedures. Please consult your Dekro representative. Repair/Maintenance: Remove oil and grease etc. Remove salt and other contaminants by (high pressure) fresh water cleaning and completely dry. Clean damaged area by abrasive blasting to the standard Sa2 1/2 (ISO 8501-1:2007) minimum or power tooling to St3 (ISO 8501-1:2007). Water jetting: Consult your Dekro representative for recommendations. Type and degree of surface preparation depends on type and condition of actual substrate and on desired performance.
Preferable Preceding Coats	Cerabond 2000, Epicon Zinc Rich Primer B-2
Preferable Subsequent Coats	-
Packaging	Two pack product
Pack Size	4,45 litre; 20 litre

Notes

1. Prior to use, consult the Safety Data Sheet (SDS) and follow the health and safety instructions. Precautionary notice is stated on the SDS and on the product label.
2. Ventilation shall be carried out during and after the coating application until the applied paint is fully cured.
3. Agitate the Base component thoroughly with a power agitator, then pour the Hardener and stir the mixture until homogenous. If thinning is necessary for workability and/or for a good coating appearance, add the recommended thinner without exceeding the maximum dilution ratio as specified and mix well before use.
4. Excessive thinning will reduce sagging resistance and may affect coating performance.
5. Only mix the amount which can be used within the pot life.
6. *Strictly follow the guidelines below:
 - (1) Cover the manholes etc., so that the coating is not exposed to direct sunlight. The maximum painting interval is as shown with ** if the coating is exposed to direct sunlight.
 - (2) Roughen the surface and apply a touch up coat if the coating is whitened due to condensation or water ingress.
7. Please ensure to follow the maximum painting interval shown with ** if the coating is exposed to weather due to block stage application.
8. *** On steel : at least 5°C above dew point
On coating : at least 3°C above dew point
9. For applications to cargo oil tanks, the painting interval is as shown with (). Application temperature is 10°C higher for that case. Please refer to **EPICON T-500** Painting Procedures in a separate document for details including the surface preparation.
10. Characteristically epoxy coatings chalk and fade upon exposure to sunlight.
11. Density, VS and VOC contents are measured from product samples without thinning. Values may vary depending on colour, manufacturing process, local regulations, etc.
12. For application condition and any other information, please consult with your local Dekro office.

Technical Data (at 125 μm)

Item \ Temp(°C)	0	5	10	15	20	25	30	35	40	
Set to touch	-	3.5H	2.5H	2H	1.5H	1H	30m	20m	15m	
Dry to hard	-	36H	24H	18H	12H	8H	6H	5H	4H	
Dry to recoat	Min.	-	36H	24H	18H	12H	8H	6H	5H	
	Max.*	-	28D	28D	28D	28D	28D	28D	28D	
	Max.**	-	28D	28D	24D	21D	18D	14D	12D	
	Max.***	-	10D	10D	9D	7D	6D	5D	4D	
Dry to immerse	Body coating	-	20D	15D	10D	7D	7D	5D	5D	
	Touch-up	-	15D	12D	9D	6D	5D	4D	3D	
Temporary Immersion****	-	10D	8D	6D	5D	4D	3D	2D	2D	
Pot life	-	10H	7H	6H	5H	4H	3H	2H	1.5H	
Shelf life (M)	-	12M	12M	12M	12M	12M	12M	12M	12M	
Max. heat resistance	Continuous: 60°C / Non-continuous: 75°C									

Abbreviation: Y : Year, M : Month, D : Day, H : Hour, m : Minute

*: Between Epicon T-500 Primer H and Epicon T-500

** : Between Epicon T-500 and Epicon T-500. (In case that the surface is never exposed to sunshine.)

***: Between Epicon T-500 and Epicon T-500 (In case of outdoor exposure.)

****: It means temporary immersion time for tank test or sea trial at C.O.Tk. (max. period of immersion: 7 days)

Application

Correct surface preparation is essential for good product performance and all surfaces should be prepared as per the standard Dekro Preparation Specifications. Copies of these are available on request from your nearest Dekro Paints branch and/or stockist or can be downloaded from our website.

Safety Instructions

Always keep out of reach of children and animals.

Wear a suitable dust mask and goggles when preparing surfaces. Ensure good ventilation during application and drying.

If accidental contact with skin, wash immediately with soap and water or a recognised skin cleaner.

If accidental contact with eyes, rinse immediately with plenty of water and seek medical advice.

Harmful if swallowed. Seek medical attention and do not induce vomiting.

General

Different surfaces and environmental conditions require specific painting systems to produce the best possible results.

It is therefore recommended that you contact a Dekro Sales representative for advice on all your painting requirements whenever possible.

The technical data furnished is given to the best of our knowledge and based on controlled laboratory tests under ideal application conditions. No guarantee of any performance characteristic is therefore given or implied and we do not hold ourselves responsible for any consequential damage of whatsoever nature that may arise from use of our products. In the event of a proven product fault our liability will be limited to the replacement of the product only. It is the user's responsibility to confirm the currency of product data sheets.