

BANNOH 1500

Product description:

BANNOH 1500 is a multi-purpose high solid epoxy primer, which gives excellent physical properties such as toughness, abrasion resistance and adhesion, etc., and has excellent flexibility, resistance to sea water and cathodic protection.

It is suitable for most areas of the ship as universal primer.

Easy to clean the coating between the cargo shifts.

TECHNICAL DATA

Type: Epoxy paint

Recommended use: Anti-corrosive paint for ship's hull, exposed decks, superstructures and ballast water tanks, etc.

Surface Preparation: New steel: Consult your CMP representative for recommendations.
 Repair/Maintenance: Remove oil and grease etc. Remove salt and the other contaminants by (high pressure) fresh water cleaning and completely dry. Clean damaged area by abrasive blasting to the standard Sa2 (ISO 8501-1:2007) minimum or power tooling to St3 (ISO 8501-1:2007). Water jetting: Consult your CMP representative for recommendations. Type and degree of surface preparation depends on type and condition of actual substrate and on desired performance. Use in accordance with standard worldwide marine specifications.

Physical Data:

Colour:	Grey, Red Brown		
Flash point:	33°C (Mix)		
Volume solids %:	73 ±2	(ISO : 3233 (1998))	
VOC (Theoretical):	286 g/l.		

Application Details:

Mixing ratio:	Base: 79	Hardener: 21	(by volume)
Thinner:	EPOXY THINNER A		
Min. Temperature:	0 °C		
Surface temperature:	Dew point + minimum 3°C		
Max. humidity:	Maximum 85% R.H.		
Application Data:	Airless spray, roller and brush*		
	Add the hardener to the base whilst mixing. Stir well before use.		

For airless spray:

Tip No.:	Graco 519 - 723
Paint output pressure:	15 - 25 MPa
Thinning:	0 - 15% by volume

Film thickness and spreading rate:

	Min.	Max.	
Film Thickness, wet:	137	342	µm
Film Thickness, dry:	100	250	µm
Spreading Rate:	7,3	2,9	m ² /l
	(theoretical)		

Preferable preceding coating: CERABOND 2000, EPICON ZINC RICH PRIMER B-2, etc.

Preferable subsequent coating: UMEGUARD/EPICON series, ACRI, UNY MARINE, BANNOH 500R, BANNOH 1500 S Z, SILVAX SQ-K, CMP AC, PERMAX No. 3000 S, PERMAX No. 3000 S W, PERMAX No. 3300.

Packing: Two Pack Product

Notes: * In case of roller and brush application more layers may be required to achieve the specified film thickness.

When painting edges and welds, stripe coating is recommended.

In confined spaces such as tanks, void spaces, etc. ventilation is required during application and curing to remove vapours and to promote curing.

Temperature	Drying time (at DFT 200 μ)	Overcoating interval (at DFT 200 μ)	Induction time	Pot life	Dry to launch	Remarks
-5 °C	-	-	-	-	-	-
0 °C	Surface dry:20 hours Hard dry 48 hours	Min.: 48 hours Max.: *	-	7 hours	-	-
5 °C	Surface dry:15 hours Hard dry 30 hours	Min.: 30 hours Max.: *	-	6 hours	-	-
10 °C	Surface dry:11 hours Hard dry 19 hours	Min.: 19 hours Max.: *	-	5 hours	-	** 18 days
20 °C	Surface dry:4 hours Hard dry 9 hours	Min.: 9 hours Max.: *	-	3 hours	-	** 10 days
30 °C	Surface dry:2,5 hours Hard dry 5 hours	Min.: 5 hours Max.: *	-	1,5 hours	-	** 6 days

Note: Drying times and overcoating intervals will increase with increasing film thickness applied.

Before re-coating, always check that the existing paint film is 'through' dry.

*For overcoating details, see tables on page 3.

** Waiting time before the first cargo loading.

Safety information: If Health, Safety and Environmental information is required a Health and Safety Data Sheet can be obtained from Chugoku Paints B.V.

Personal Protection advice and additional information can be obtained from the product Health and Safety Data Sheet which is available on request. The minimum safety precautions in dealing with this paint are:

- Observe the precautionary notices displayed on the container.
- Provide adequate ventilation.
- Avoid skin contact and inhalation of spray mist.
- If the product comes into contact with the skin, wash thoroughly with luke warm water and soap or suitable cleaner. If the eyes are contaminated, irrigate with water and seek medical advice immediately.
- Since the product contains flammable materials, keep away from sparks and open flames. No smoking should be permitted in the area.

Definitions:	Tolerances:	The numerical information quoted in this Technical Data Sheet is subject to normal manufacturing tolerances.
	Spreading Rate:	The spreading rate can vary depending on application conditions, the geometrical complexity of the structure, the weather conditions, etc.
	Volume Solids:	The volume solids figure given in this Technical Data Sheet is the percentage of dry film obtained from a given wet film thickness under specified application rate and conditions measured by the Chugoku Standard Method corresponding to ASTM method D2697.
	Overcoating Intervals:	The intervals given assume preparation consistent with good painting
	Hard dry:	The time taken until the product can be walked on without damaging it. Time taken until full mechanical strength is obtained is longer.
	V.O.C.:	Theoretical quantity of volatile organic compounds in g/l.

Disclaimer: Data, specifications, directions and recommendations given in this data sheet represent test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use is not guaranteed and must be determined by user. Product data is subject to change without notice and automatically void two years from issue. All legal relations of Chugoku Paints B.V. will be governed by the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. as last filed with the district court of Rotterdam and upon request they will be made available without charge. Chugoku Paints B.V. explicitly rejects the applicability of any General Conditions, which its contractual parties may use. Exclusive jurisdiction: competent Court in Rotterdam.

The Inspector will undertake to the best of their ability, to carry out assistance during application of the products delivered by Chugoku, by only rendering advice in connection with the application at site. The Inspector undertakes to carry out the project in a conscientious manner, but Chugoku and/or the Inspector will not accept any kind of liability, direct or indirect, if the project does not give the results expected. Under all circumstances, the Buyer remains responsible for the execution of the project. Any advice and/or assistance rendered by the Inspector will be subject to such (final) responsibility of the buyer, and moreover subject to the Uniform Terms of Sale and Delivery of Chugoku Paints B.V. Even when damages or delays have been caused by faults or negligence on the side of Chugoku and/or the Inspector, such will not result in any liability whatsoever of Chugoku or the Inspector. Liability of both Chugoku or the Inspector for any consequential damages is explicitly excluded.

Some products have been specially modified to adapt to specific European requirements with regard to European-, national- and local laws and regulations or with regards to specific European use requirements. As a result some physical properties in a TDS may differ from those given in the original Japanese TDS.

Table-1 : Over coatability between BANNOH 1500 and various subsequent coats for DK & INT, TS, BT, Hull

DK & INT: DECK AND INTERIOR
TS: TOPSIDES
BT: BOOTTOP
Hull: HULL

OVERCOAT	E X I S T I N G BANNOH 1500			
	DK & INT	TS	BT	HULL
ACRI 700 FINISH	15 days	3 days	3 days	-
EPICON MARINE FINISH	180 days	150 days	120 days	-
UNY MARINE HS	7 days	4 days	-	-
BANNOH 1500	180 days	180 days	150 days	150 days
BANNOH 1500 QD	120 days	120 days	120 days	120 days
BANNOH 1500 S Z	-	-	120 days	120 days
BANNOH 1500 S Z QD	-	-	120 days	120 days
SILVAX SQ-K	-	-	5 days	5 days
CMP AC	-	-	7 days	7 days
PERMAX No. 3000 S	-	-	7 days	7 days
PERMAX No. 3000 S W	-	-	5 days	5 days
PERMAX No. 3300	-	-	7 days	7 days

Table-2 : Over coatability of BANNOH 1500 for COT, BWT, HOLDS

COT: CARGO OIL TANKS
BWT: BALLAST WATER TANKS
HOLDS: HOLDS

	COT	BWT	HOLDS
BANNOH 1500 + BANNOH 1500	30	30	60
BANNOH 1500 + BANNOH 1500 QD	30	30	60
BANNOH 1500 QD + BANNOH 1500	30	30	60
BANNOH 1500 QD + BANNOH 1500 QD	30	30	60

(Max. painting interval : day)