**Sheet No. : 5083-K**
**Issued Date :** Jan. 2023

# BANNOH 2000 QD

(B 2000 QD)

## PRODUCT DESCRIPTION

**BANNOH 2000 QD,** is a multi-purpose epoxy primer, which provides excellent physical properties including toughness, abrasion resistance and adhesion, etc., It has an excellent flexibility, resistance to sea water and cathodic protection.

This product is IMO PSPC type approved for WBT and COT, applicable to most area of ship and excellent low temperature curing property.

## PRODUCT INFORMATION

| | | | | | |
|---|---|---|---|---|---|
| **Type** | Polyamine adduct cured epoxy | | | | |
| **Recommended Use** | Anti-corrosive paint for ship's hull, exposed decks, superstructures and ballast water tanks, crude oil tanks, etc. | | | | |
| **Type of binder** | Pure Epoxy / Polyamine adduct resin | | | | |
| **Mixing Ratio** | Base : Hardener = 75 : 25 (by volume) | | | | |
| **Color** | Brown, Red Brown, Grey, Light grey, Yellow grey and specified colors | | | | |
| **Flash Point** | Base : 32.5 ℃, Hardener : 27.0 ℃ | | | | |
| **Solids by Volume** | 80% ± 2 (Test Method : ISO-3233) | | | | |
| **VOC** | 189 g/ℓ (EPA Method24), 292 g/ℓ (Korea Clean Air Conservation Act) | | | | |
| **Coverage(Theoretical)** | 5.00 ㎡/ℓ [0.200 ℓ/㎡] at D.F.T 160㎛ | | | | |
| **Wet Film Thickness** | 125 – 313 ㎛ | | | | |
| **Dry Film Thickness** | 100 – 250 ㎛ | | | | |
| **Drying Time (at D.F.T. 160㎛)** | Temperature | 5℃ | 10℃ | 20℃ | 30℃ |
| | Surface Dry | 7 hrs. | 4 hrs. | 1 hrs. | 40 min. |
| | Hard Dry | 13 hrs. | 8 hrs. | 5 hrs. | 3 hrs. |
| **Painting Interval (at D.F.T. 160㎛)** | Minimum | 13 hrs. | 8 hrs. | 5 hrs. | 3 hrs. |
| | Maximum | - | - | - | - |
| **Pot Life** | | 6 hrs. | 4 hrs. | 2 hrs. | 1 hrs |
| **Thinner** | EPICON THINNER, EPOXY THINNER A | | | | |
| **Method of Application** | Airless spray, Brush, Roller | | | | |
| **Condition of Application** | Temperature : Minimum -15℃<br>Humidity : Maximum 85 % R.H.<br>For Airless spray ;<br>Tip No. : GRACO 619, 621, 623<br>Paint output pressure : 14.7 - 17.7 MPa<br>Viscosity : 1.5 - 2.0 Pa·s | | | | |
| **Preferable Preceding Coats** | CERABOND 2000, EPICON ZINC RICH PRIMER B-2, etc. | | | | |
| **Preferable Subsequent Coats** | BANNOH 1500R Z, EPICON MARINE HB, UNY MARINE Series, etc. | | | | |
| **Packaging** | Two pack product | | | | |

## TECHNICAL DATA (at 160㎛)

| Item \ Temp (℃) | | -10 | -5 | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Set to touch** | | 15H | 10H | 8H | 7H | 4H | 2H | 1H | 50m | 40m | 30m |
| **Dry to recoat** | **Min.** | 120H | 34H | 20H | 13H | 8H | 6H | 5H | 4H | 3H | 2H |
| | **Max.*)** | 20D | 15D | 15D | 15D | 15D | 10D | 10D | 7D | 7D | 7D |
| **Dry to hard** | | 120H | 34H | 20H | 13H | 8H | 6H | 5H | 4H | 3H | 2H |
| **Dry to immerse** | **Body** | 30D | 8D | 6D | 5D | 4D | 3D | 2D | 1.5D | 1.5D | 1.5D |
| | **Touch-up** | 20D | 5D | 4D | 3D | 2D | 1.5D | 1.5D | 1.5D | 1.5D | 1.5D |
| | **Minor touch up** | 10D | 3D | 2D | 1D | 1D | 1D | 1D | 1D | 1D | 1D |
| **Dry to Touch-up** | | 120H | 34H | 20H | 13H | 8H | 6H | 5H | 4H | 3H | 2H |
| **Pot life** | | 18H | 10H | 7H | 6H | 4H | 3H | 2H | 1.5H | 1H | 40m |
| **Shelf life (M)** | | 12M | 12M | 12M | 12M | 12M | 12M | 12M | 12M | 12M | 12M |
| **Max. heat resistance (Dry)** | | 150℃ | | | | | | | | | |
| **Max. heat resistance (Wet)** | | Continuous: 60℃ / Non-continuous: 75℃ | | | | | | | | | |

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

Notes :

1. *) For water ballast tank
2. Allowable Max DFT of Multiple coats : up to 2000microns
3. In common with all epoxy coatings, BANNOH 2000 QD will show chalking and fading on exposure to UV light.

## RECOMMENDABLE SURFACE PREPARATION

All surfaces to be free from various contaminants (oil, grease, dust, spray dust and etc.) and keep surfaces dry.
Kindly consult CSP sales office for specific information.

## SAFETY PRECAUTIONS

In order to ensure safe use of our product, please be sure to follow the safety precautions indicated on the SDS and the paint container. If you need further explanation, do not hesitate to consult our personnel or our local distributors before buying, opening, using, or disposing the product. Since product contains flammable materials, keep away from sparks and open flame. No smoking should be permitted in the area on painting.

Wear an appropriate protector (eye and face protection, protective clothing, barrier creams, etc) when mixing, applying, or drying the paint. If products come into contact with the skin, wash thoroughly with warm water and soap or suitable cleaner. If the eyes is contaminated, irrigate with water and seek medical advice immediately.

## DISCLAIMER

The information, including data, specifications, directions and recommendations, contained in this Data Sheet describes the experiment results under controlled or specially defined conditions and we do not guarantee that the Products, when used under the actual conditions of any intended use, will produce the same results. The performance of the Products in their actual use is affected by various factors, and the User must judge whether the Products are suitable for specific uses. We do not guarantee the performance of the Products under any specific operation environment other than the performance of the Products under the conditions described in this Data Sheet.

The content of this Data Sheet, which is intended for facilitation of the User's understanding and convenience of use of the Products, is subject to change at any time without prior notice. We use our best efforts to reflect the latest and most accurate information in this Data Sheet, but we will not bear any liability whatsoever relating thereto. The User must confirm that the Data Sheet is the latest version prior to using the Products.

We do not guarantee the performance or safety of the Products when used for a purpose or use other than what is described herein. Nor will we be liable for any explanation or guarantee provided by any distributor or sales agent with respect to the Products, other than what is described in this Data Sheet.

Furthermore, each of the Products described herein is composed of various chemical substances, some of which may contain toxic and/or harmful ingredients and may cause harmful results as a result of misuse or overuse of the Products. For specific causes of risk, conditions of use, harmfulness, etc. of each of the Products, please carefully read, prior to use of the Products, the MSDS (Material Safety Data Sheet) inserted in each of the Products. We will not be liable for any accident that may be caused in violation thereof.

The information given in this sheet is effective at the date shown above and subject to revision from time to time without notice.