

# CMP BIOCLEAN PLUS

(CMP BCL PLUS)

## PRODUCT DESCRIPTION

**CMP BIOCLEAN PLUS** is a three-pack silicone elastomer foul release coating.

## PRODUCT INFORMATION

|   |  |                             |          |          |          |
|---|--|-----------------------------|----------|----------|----------|
| Type                                    | Silicone elastomer foul release paint  |                             |          |          |          |
| Recommended Use                         | As a finish coat in the CMP BIOCLEAN PLUS foul release system.<br>Especially designed for ocean going liners and fast coastal vessels.               |                             |          |          |          |
| Type of binder                          | Silicone elastomer   |                             |          |          |          |
| Mixing Ratio                            | Base : Hardener : Additive = 74.5 : 16.1 : 9.4 (by volume)   |                             |          |          |          |
| Color                                   | Red Brown S  |                             |          |          |          |
| Flash Point                             | Base : 26.8 °C,    Hardener : 26.8 °C,    Additive : 25.1 °C   |                             |          |          |          |
| Solids by Volume                        | 70% ± 2 (Test Method : ISO-3233)   |                             |          |          |          |
| VOC                                     | 276 g/ℓ (EPA Method24), 295 g/ℓ (Korea Clean Air Conservation Act)   |                             |          |          |          |
| Coverage(Theoretical)                   | 3.50 m²/ℓ [0.286 ℓ/m²] at D.F.T 200 μm   |                             |          |          |          |
| Wet Film Thickness                      | 214 - 286    μm  |                             |          |          |          |
| Dry Film Thickness                      | 150 - 200    μm  |                             |          |          |          |
| Drying Time<br>(at D.F.T. 200 μm)       | Temperature  | 5 °C                        | 10 °C    | 20 °C    | 30 °C    |
|   | Surface Dry  | 6 hrs.                      | 4 hrs.   | 3 hrs.   | 2 hr.    |
|   | Hard Dry   | 13 hrs.                     | 8 hrs.   | 5 hrs.   | 3 hrs.   |
| Painting Interval<br>(at D.F.T. 200 μm) | Minimum  | -                           | -        | -        | -        |
|   | Maximum  | -                           | -        | -        | -        |
| Pot Life                                |  | 45 mins.                    | 30 mins. | 30 mins. | 30 mins. |
| Dry to launch                           | Minimum  | 36 hrs.                     | 30 hrs.  | 24 hrs.  | 18 hrs.  |
| Thinner                                 | RAVAX THINNER, SILICON THINNER A<br>Thinning: 5% (0-5deg C), 3% (6-10deg C) 0% (over 10deg C)<br>(for cleaning only EPICON THINNER, EPOXY THINNER A) |                             |          |          |          |
| Method of Application                   | Airless spray, Brush   |                             |          |          |          |
| Condition of Application                | Temperature  | : Minimum    0 °C           |          |          |          |
|   | Humidity   | : Maximum    30 ~ 85 % R.H. |          |          |          |
|   | For Airless spray ;  |                             |          |          |          |
|   | Tip No.  | : GRACO 519 - 721           |          |          |          |
|   | Paint output pressure  | : Min. 20.0 MPa             |          |          |          |
| Preferable Preceding Coats              | CMP BIOCLEAN HB, CMP BIOCLEAN R, CMP BIOCLEAN R PLUS<br>CMP BIOCLEAN UNDERCOAT PLUS  |                             |          |          |          |
| Packaging                               | Three pack product   |                             |          |          |          |

**TECHNICAL DATA (at 200 $\mu$ m)**

| Temp (°C)            |          | -5                    | 0   | 5   | 10  | 15   | 20  | 25   | 30  | 35  | 40  |
|----------------------|----------|-----------------------|-----|-----|-----|------|-----|------|-----|-----|-----|
| Item                 |          |                       |     |     |     |      |     |      |     |     |     |
| Set to touch         |          | -                     | 8H  | 6H  | 4H  | 3.5H | 3H  | 2.5H | 2H  | 1H  | 1H  |
| Dry to recoat        | Min.     | -                     | -   | -   | -   | -    | -   | -    | -   | -   | -   |
|                      | Max.     | -                     | -   | -   | -   | -    | -   | -    | -   | -   | -   |
| Dry to hard          |          | -                     | 19H | 13H | 8H  | 6.5H | 5H  | 4H   | 3H  | 2H  | 2H  |
| Dry to immerse       | Body     | -                     | 46H | 36H | 30H | 27H  | 24H | 21H  | 18H | 16H | 14H |
|                      | Touch-up | -                     | 46H | 36H | 30H | 27H  | 24H | 21H  | 18H | 16H | 14H |
| Pot life             |          | -                     | 45m | 45m | 30m | 30m  | 30m | 30m  | 30m | 20m | 20m |
| Shelf life (M)       |          | -                     | 12M | 12M | 12M | 12M  | 12M | 12M  | 12M | 12M | 12M |
| Max. heat resistance |          | 60°C (Non-continuous) |     |     |     |      |     |      |     |     |     |

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

**Notes :**

Agitate Base with a power agitator until it is turned homogeneous, and then combine entire contents of Hardener with Base and mix thoroughly with power agitator. Then add Additive and mix thoroughly.

**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.

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