

# **COLGEL GC 215-02**

# **Gel Coat**

## **Description:**

- Colgel GC 215-02 iso/NPG gel coat is formulated to yield high performance against water and was primarily developed for quality marine applications but should be used in any FRP application where high performance characteristics are desired.
- Colgel GC 215-02 has volatile content (VOC) of ca. 35 wt%.
- >> Colgel GC 215-02 is ready to use, easy to spray, sag resistant and require only the addition of proper amount of an appropriate MEKP-50 to cure.

### Specifications at 25 °C:

These values may or may not be manufacturing criteria; they are listed for a reference guide only. Particular batches may not conform exactly to the numbers listed because storage conditions, temperature changes, age, testing equipment (type and procedure) can each have a significant effect on the results. Gel coats with properties outside of these ranges can perform acceptably.

| Property                   | Range             | Method / According to standard |
|----------------------------|-------------------|--------------------------------|
| Viscosity; #4/10 rpm       | 7000 - 9000 mPa·s | MH1009 / ISO 3219              |
| Thixotropic index (2.5/20) | 5.0 - 7.0         | MH1009 / ISO 3219              |
| Gel time with 2% MEKP-50   | 6 - 12 minutes    | MH3021                         |
| Monomer content (VOC)      | 34 - 36%          | MH2034                         |

# Physical characteristics of cured nonreinforced base resin:

| Property                    | Range            | Method / According to standard |
|-----------------------------|------------------|--------------------------------|
| Density, 20 °C              | 1.15 - 1.20 kg/L | ISO 1183                       |
| Barcol hardness             | 35 - 45          | EN 59                          |
| Tensile strength            | 80 - 90 MPa      | ISO R 527                      |
| Elongation at break         | 3 - 4%           | ISO 178                        |
| Flexural strength           | 120 - 140 MPa    | ISO 178                        |
| E - modulus in tension      | 3400 - 3600 MPa  | ISO R 527                      |
| Heat distortion temperature | 85 - 95 °C       | ISO 75 A                       |

## Application:

- Colgel GC 215-02 gel coats are generally formulated for airless as well as conventional spray application.
- Brushing or rolling is not recommended.
- Do not add solvents such as acetone.
- If required 1 3% of styrene may be added, to obtain optimum viscosity for special application purpose.

# Cure:

>> It is recommended that gel time is checked in the customer's plant, because age, temperature, humidity and catalyst will produce varied gel times.

**Note:** The information contained herein is provided in good faith and is to the best of our knowledge accurate, but we assume no liability for its accuracy or completeness. Therefore, the buyer is advised to determine the suitability of this product for the intended use. We retain the right to make any changes according to technological progress or further developments. For safety information please refer to the current Material Safety Data Sheet.

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# TECHNICAL DATA SHEET



- All data referencing gel or cure refers specifically to AKZO NOBEL Butanox M-50 catalyst.
- The catalyst level should not exceed 3% or fall below 1.5% for proper cure. Recommended range is 1.8 2.2%.
- >> This product should not be used when temperature conditions are below 18 °C.

### Caution:

- Do not over mix gel coats. Over-mixing breaks down gel coat viscosity, increasing tendencies to sag and causes styrene loss, which could contribute to porosity.
- Gel coat should be mixed once a day for 10 minutes. Air bubbling should not be used for mixing.
- Do not add any material other than a recommended MEKP-50.

## Storage:

Uncatalyzed, standard cure gel coats have a usage life of 4 months from date of manufacture when stored at 25 °C or below in a closed container out of direct sunlight.

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