

COLGEL GC 647 FR G

Fire Retardant Gel Coat

Description:

- » Colgel GC 647 FR G iso/NPG gel coats are quality coatings for the fiberglass industry.
- » These gel coats provide quality finishes and are ready to use, easy to spray, sag resistant and require only the addition of proper amount of an appropriate MEKP-50 to cure.
- » Due to a finely tuned combination of flame retarding additives, Colgel GC 647 FR G gelcoats possess excellent fire protection properties.

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; #5/10 rpm	7000 - 9500 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	20 - 35%	MH2034
Density	1.3 - 1.4 kg/L	MH1028 / ISO 2811

Physical characteristics of cured nonreinforced base resin:

Property	Range	Method / According to standard
Barcol hardness	41 - 45	EN 59
Tensile strength	80 - 90 MPa	ISO R 527
Elongation at break	3.5 - 5.5%	ISO 178
Flexural strength	130 - 150 MPa	ISO 178
E - modulus in tension	3000 - 3300 MPa	ISO R 527
Heat distortion temperature	90 - 100 °C	ISO 75 A

Application:

- » Colgel GC 647 FR G 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.
- » All data referencing gel or cure refers specifically to AKZO NOBEL Butanox M-50 catalyst.

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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- » 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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