

1. CHARACTERISTICS

Polyester gel coat GC 185 is fire retardant, partially isophtalic.

- Pre accelerated and thixotroped, exists in spray (GC 185) or brush (GP 185) applications.
- Good quality, UV Stablized.
- Curing at ambient temperature with MEKP peroxide.
- Food contact applications: according to the global migration test. Report RE N° -15/12303 of 21 July 2015

Laminates realized with GC 185 and the resin NORESTER® 85 obtained M1F2 and class 1 classification.

- M1: certificate n° 007/68/160A dated 05 July 2016, according to order of 11/21/2002 and following the standard NF P 92-501.
- F2: certificate n° 007/68/160A dated 05 July 2016, according to the standard NF X 700-100-1/2 and NF X 10-702.
- Class 1 following BS476 part 7 with NORESTER[®] 85, certificate n° 283390 dated 12/12/2012.

Laminates realized with GC 185 and the resin NORESTER[®] 85 obtained S4SR2ST2 and FED index < 1 classification.

- S4SR2ST2: according to german regulation DIN 5510-2 and certificate n° P 60-12-0787 of 22/10/12.
- FED Index < 1: according to german regulation DIN5510-2 and ISO 5659-2 and certificate n° P60-12-3357 of 24/10/12.

Laminates realized with GC 185 and the resin NORESTER[®] 056/113 obtained B2D3T2 following the norms GOST 30402-96 and 12.1.044-89.

Laminates realized with GC 185 and the resin NORESTER[®] 056/130 obtained M2F2.

- M2: certificate n° 07/71/102B dated 16 May 2017, according to order of 11/21/2002 and following the standard NF P 92-501.
- F2: certificate n° 07/71/102B dated 16 May 2017, according to the standard NF X 700-100-1/2 and NF X 10-702.

2. PROPERTIES OF LIQUID GEL COAT

Brookfield viscosity Spray version - GC185 (ISO 2555 - 20°C – sp5)	5 rpm : 140 - 240 Poise 50 rpm : 24 - 36 Poise
Specific gravity (ICON 012)	1.27 - 1.41 g/cm ³
Drying time on film (20°C – 2% MEKP M50 on 100 g)	40 - 60 minutes

3. MECHANICAL PROPERTIES OF CAST GEL COAT

Flexural strength* (ISO 178)	61.1 MPa
Flexural modulus* (ISO 178)	4.196 GPa
Tensile strength* (ISO 527)	38.43 MPa
Elongation at break* (ISO 527)	2.48%
Temperature of deflection under load* (HDT) (ISO 75-3)	76.6°C

IMPORTANT

All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the **GC 185**, if the application conditions specified are not respected.

It is imperative that the user must also ensure that his application and his process are appropriate for this product to be used. We hereby the conformity of our products with the above specifications. We cannot be responsible for any damage caused by misuse of this product or use of the product for an application not covered in the design.



Barcol hardness*

(ASTM 2583)

45

*Mechanical tests realised on the cured GC 185 gel coat with 2% MEKP. Post cure: 3 hours at 80°C.

4. VERSIONS

The gel coat GC 185 is available in high resistance of abrasion version (HRA): GH 185.

The gel coat GC 185 is available in brush version: GP 185, with a gel time of 6 - 10 minutes (20° C - 2% MEKP M50 on 100 g), a viscosity at 5 rpm: 375 - 525 Poise and at 50 rpm: 70 - 90 Poise (sp6 – 20° C).

The gel coat GC 185 is available in promoted version: GR 185, with a drying time on film of 45 - 55 minutes (20°C - 2% MEKP M50 on 100 g). This version is stable for 2 months from date of production.

5. RECOMMENDATIONS BEFORE USE

- Mix the peroxide very well, never put less than 1% and more than 3% of peroxide.
- Before use, check that the temperature of the mould, of the room and of the gel coat is between 18°C and 25°C.
- We recommend to catalyst the GC 185 with 2% of MEKP peroxide.
- GC 185 is ready to use, homogenate the product before use.
- Avoid thickness especially in angles. We recommend the application of several thin layers rather than a thick one.
- Put 0.4 to 0.5 mm thickness of gel coat about 500 g/m².
- We retain the attention on the fact that this gel coat is classified according to the certificates named here above and according to the application in our laboratory. It is the responsibility of the customer to assure that the mould realised by himself is well classified.

6. POST CURING

To obtain optimum resistance properties, the laminate with the gel coat **GC 185** must be post-curing. In order to accelerate the hardening, the laminate stays at ambient temperature (16 to 20 °C) during 24 hours followed a post-curing of 16 hours at 40°C. We advise to do a post-curing immediately after ripening period to obtain optimums results.

7. PACKAGING

Available in cans of 25 kg.

8. STORAGE CONDITIONS AND HANDLING

Storage life: Gel coat GC 185 is stable for 3 months from date of production. The product must be stored in original closed packaging at a temperature between 15°C and 25°C, away from direct sunlight.

It is the responsibility of the customer to assure that the product is used in good conditions overall before the date limitation mentioned on the keg.

The gel coat is subject to the Highly Flammable Liquids Regulations.

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