

TECHNICAL DATA SHEET

GC 185
Fire retardant gel coat
NTG 013 Y -09/09/20
Page: 1/2

1. CHARACTERISTICS

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

- Pre accelerated and thixotroped, for spray application.
- Good quality, UV Stablized.
- Curing at ambient temperature with MEKP peroxide.

Laminates realized with GC 185 and the resin NORESTER® 85 obtained M1F2 (following the standard NF P 92-501, NF X 700-100-1/2 and NF X 10-702), class 1 classification (following BS476 part 7).

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

- Classification S4SR2ST2 (according to german regulation DIN 5510-22).
- FED Index < 1 (according to german regulation DIN 5510-22 and ISO 5659-2).

Laminates realized with GC 185 and the resin NORESTER® 056/130 obtained M2F2 (following the NF P 92-501 and according to the standard NF X 700-100-1/2 and NF X 10-702).

 GC 185 is certified no proliferation bacteria according to the test method JIS Z 2801:2010 under the reference GC 185 AB.

2. PROPERTIES OF LIQUID GEL COAT

Brookfield viscosity (ISO 2555 - 23°C – sp5)	5 rpm : 140 - 240 Poise 50 rpm : 22 - 36 Poise
Specific gravity (ICON 012)	1.27 - 1.41 g/cm ³
Drying time on film (23°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
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 all colour tones. Please contact our technical service to know the feasibility of the coloured wished.

Versions with the same characteristics:

IMPORTANT

All tests results presented in this technical data sheet have been obtained in our laboratory. We can't be held responsible of manufactured parts with the gel coat **GC 185**, if the specified application conditions are not properly followed. It is imperative that the user also ensures that his application and his process are appropriate for this product to be used. We guaranty the conformity of our products with the above specifications. We cannot be held responsible for any damage caused by misuse of this product or use of the product for an application not specified in this data sheet.



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GC 185 Fire retardant gel coat NTG 013 Y -09/09/20

Page : 2/2

	GH 185	GF 185
Description	HRA : Resistance of abrasion	Top coat

Versions with different characteristics:

	GR 185
Description	Promoted
Brookfield viscosity (ISO 2555 - 23°C)	5 rpm : 140 - 240 Poise 50 rpm : 22 - 36 Poise
Drying time on film (ICON 002) (23°C - 2% MEKP M50 on 100 g)	45 - 55 minutes

The gel coat GC 185 is available in brush version: GP 185 (See technical data sheet)

5. RECOMMENDATIONS BEFORE USE

- Mix the peroxide very well, never put less than 1.25% and more than 2.5% 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 0.5 to 0.6 mm thickness of wet gel coat.
- 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 kegs of 25 kg and in drums of 225 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.

IMPORTANT

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