

1. CHARACTERISTICS

Gel coat **GC 199** is based on an ISO-NPG polyester resin. It has good quality of hydrolysis resistance and weathering resistance. It is halogen free.

- Gel coat **GC 199** is thixotropic and pre accelerated. It is available in brush application (**GP 199**) and spray application (**GC 199**).
- Freedom from drainage on inclined surfaces.
- Good handle-ability and coverage.

Classification in association with **NORESTER® 056/113**:

- **M2 F2**: certificate n° 007/71/102 A dated 16th May 2017 (according to NF F 16-101, NF P 92-501, NF X70-100 et NF X 10-702).
- **V0** following the norm NF EN 60695-11-10:2013 or UL94:2013 certificate n°007/73/015 A dated on 02/02/18.
- **DS3D2** following the building norm NF EN 13501-1: 2007 + A1: 2009. Tests realised following the norms EN ISO 11925-2: 2010 and EN 13823: 2010. Certificates 2014-Efectis –R000894, 000895 and 000896 n° 2014428 dated november 2014.

Classification in association with **NORESTER® 895**:

- **M2**: certificate n° 007/45/093A dated 23/05/2013 (according to arrêté of 21/11/2002).
- **F1**: certificate n° CC F 007/46/134A dated 13/06/2013 (following the norms NF X 70-100-1/2, NF X 10-702 and NF F 16-101).
- **S4SR2ST2**: certificate n° P60-15-0074 dated 27th January 2015 (according DIN 54837 / DIN 5510, part 2).

Classification in association with **NORESTER® 880 CONTACT**:

- **S4SR2ST2**: certificate n° P60-17-0170 dated 17th February 2017 with **NORESTER® 880 CONTACT** (according DIN 54837 / DIN 5510, part 2).

Classification **CLASS B** or **CLASS 2** with the **NORESTER® 880** (100 parts of resin R880 and 180 parts of ATH) following the norm ASTM E84 report 17-002-305(A) dated 13/06/2017.

2. PROPERTIES OF LIQUID GEL COAT

Brookfield viscosity Spray version - GC199 (ISO 2555 - 20°C - sp5)	5 rpm : 140 - 200 Poise 50 rpm : 22 - 28 Poise
Brookfield viscosity Brush version - GP199 (ISO 2555 - 20°C – sp6)	5 rpm : 375 - 525 Poise 50 rpm : 70 - 90 Poise
Specific gravity (ICON 012)	1.25 - 1.50 g/cm ³
Non volatile content (ICON 003)	68%
Geltime (ICON 002) (20°C – 2% MEKP on 100 g)	GC 199 : 10 - 14 min GP 199 : 10 - 14 min

IMPORTANT

All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the **GC 199**, 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.

3. MECHANICAL PROPERTIES OF CAST BASE RESIN

Flexural strength* (ISO 178)	130 MPa
Tensile strength* (ISO 527)	80 MPa
Elongation at break* (ISO 527)	3.5%
Temperature of deflection under load* (HDT) (ISO 75-3)	95°C
Barcol hardness*	45 after 24 hours

*Mechanical tests realised on the cured base resin of gel coat **GC 199** with 2% MEKP.
Post cure: 16 hours at 40°C.

4. VERSIONS

Gel coat **GC 199** is available in Top Coat version: **GF 199**.

Gel coat **GC 199** is available in **EASYCLEAN** version allows flow of the faster water to reduce fouling of parts.

Gel coat **GC 199** is available in promoted version: **GR 199** with a gel time of 6 - 8 minutes (20°C - 2% MEKP on 100 g).

Gel coat **GC 199** is available in promoted and low viscosity version: **GR 199 BV** with a gel time of 6 - 8 minutes (20°C - 2% MEKP on 100 g) and a viscosity at 5 rpm: 140 - 180 Poise and at 50 rpm: 22 - 26 Poise (20°C - sp5)

Gel coat **GC 199** is available in internal release agent and promoted version: **GA 199** with a gel time of 6 - 8 minutes (20°C - 2% MEKP on 100 g).

Gel coat **GC 199** is available in long gel time version: **GC 199 LGT** with a gel time of 17 - 23 minutes (20°C - 2% MEKP on 100 g).

Gel coat **GC 199** is available in low styrene content version: **GC 199 LSC** with a styrene rate of 15 - 20%.

5. RECOMMENDATIONS BEFORE USE

- Mix the peroxide well, never put under 1% or over 3%.
- 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 **GC 199** with 2% of MEKP peroxide
- Gel coat is ready to use; stir the gel coat each time before use to give a homogeneous product.
- It is formulated to give good characteristics of application with AIRLESS project and spray gun at gravity with a nozzle of 2,8 mm (**GC 199** version)
- Put 0,5 to 0,6 mm thickness of gel coat approximately 500 g/m²
- Avoid thickness especially in angles. We recommend the application of several thin layers rather than a thick one.
- 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 laminate realised by himself is well classified.

IMPORTANT

*All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the **GC 199**, 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.

6. POST CURING

To obtain optimum resistance properties, the laminate with the gel coat **GC 199** must be post-curing. 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 optimum 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 199** 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

*All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the **GC 199**, 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.