



## **1 CHARACTERISTICS**

**GC 168** is a gel coat based on ORTHO/Iso resin to use for quality applications.

- Pre-accelerated and thixotroped: for spray application.
- Freedom from drainage on inclined surfaces.
- Good handle ability and coverage.
- No porosity.
- A fast drying.
- Food contact applications: according to the global migration test.  
Report RE N° -15/12297 of 21 July 2015

## **2 PROPERTIES OF LIQUID GEL COAT**

Brookfield viscosity (ISO 2555 - 20°C - sp5)	5 rpm : 140 - 200 Poise 50 rpm : 22 - 28 Poise
Specific gravity (ICON 012)	1.25 - 1.40 g/cm <sup>3</sup>
Non volatile content (ICON 003)	60 - 70 %
Geltime (ICON 002) (20°C – 2% MEKP on 100 g)	10 - 14 min

## **3 MECHANICAL PROPERTIES OF CAST GEL COAT**

Flexural strength* (ISO 178)	80 - 100 MPa
Flexural modulus* (ISO 178)	3.6 - 3.8 GPa
Tensile strength* (ISO 527)	38 - 50 MPa
Elongation at break* (ISO 527)	2.3 - 2.8 %
Temperature of deflection under load* (HDT) (ISO 75-3)	72°C
Barcol hardness*	50

## **4 VERSIONS**

Gel coat **GC 168** is available in all colours.

Whatever the formulation of gels coat, dark colors have lowest yellowing resistance than white and pastel colors. For this reason we do not recommend the use of **GC 168** in dark colors for parts required a good yellowing resistance specially for outside parts.


Any time our technical department is at your disposal to achieve indicative aging tests on the color chosen.

### **IMPORTANT**

*All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the **GC 168**, 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.*

 <b>NORD COMPOSITES</b>	<b>TECHNICAL DATA SHEET</b>	<b>GC 168</b> <b>Gel Coat Polyester</b> NTG 099 R – 23/02/16 Page : 2/2
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This gel coat is available in:

- Low viscosity version: **GC 168 BV** with a viscosity at 5 pm: 130 - 170 Poise and at 50 rpm: 23 - 27 Poise (20°C – sp5).
- Long gel time: **GC 168 LGT** with a gel time of 23 - 27 min (20°C – 2 mL MEKP M50 on 100 g).
- Top coat and promoted version: **GFR 168** with a gel time of 6 - 8 min (20°C – 2 mL MEKP M50 on 100 g).
- Promoted version: **GR 168** with a gel time of 6 - 8 min (20°C – 2 mL MEKP M50 on 100 g).
- PR and auto release: **GA 168**.
- Auto release version: **GD 168**.
- Top coat version: **GF 168**.
- HRA version: **GH 168**.
- UV stabilized version: **GL 168**.
- Brush version: **GC 161**, viscosity at 5 rpm: 250 - 350 Poise and at 50 rpm: 60 - 80 Poise (20°C - sp6).
- Brush and low viscosity version: **GC 161 BV**, viscosity at 5 rpm: 200 - 300 Poise and at 50 rpm: 50 - 70 Poise (20°C - sp5).
- Brush and top coat version: **GF 161**

## 5 RECOMMENDATIONS BEFORE USE

- **GC 168** is ready to use, stir the gel coat each time before use to give a homogeneous product.
- To obtain optimum polymerization, the level of catalyst MEKP (Butanox M50 type) should be between 1% and 2% according to the size of the part to be made and the room temperature (we recommend 20°C).
- Put 0.5 to 0.7 mm thickness of gel coat (about 600 g/m<sup>2</sup>)
- Avoid excess thickness especially in angles. We recommend the application of several thin layers rather than a thick one.

## 6 POST CURING

To obtain optimum properties of the **GC 168**, it is necessary to fully cure the laminate (GC and resin). The laminate must stay at ambient temperature (16 - 20°C) for 24 hours, then, we advise to post-cure for 16 hours at 40°C. This post-curing must be done immediately after the initial cure.

## 7 PACKAGING

Available in cans of 25 kg and in drums of 225 kg.

## 8 STORAGE CONDITIONS AND HANDLING

Storage life: Gel coat **GC 168** 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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