

1. CHARACTERISTICS

Gel coat **GC 207** is based on a vinyl ester resin. The gel coat is suitable for polyester laminate mould making and for spray applications.

- Thixotropic and pre-accelerated.
- Good handle ability.
- High quality with very good mechanical properties.
- Application airless machine. Nozzle 40/21 or 50/21. Pressure 3 - 4 bars.
- High brightness. The brightness measured by our laboratory: 95 with a gloss meter with a 60 degrees angle.
- The **GC 207** is a good tools gel coat due to the high temperature resistance and the chemical resistance, especially for the short cycle application (RTM for example) or molding of concrete polyester.

2. PROPERTIES OF LIQUID GEL COAT

| | |
|---|---|
| Brookfield viscosity (ISO 2555 - 23°C - sp5) | 5 rpm : 100 - 150 Poise 50 rpm : 21 - 25 Poise |
| Specific gravity (ICON 012) | 1 - 1.10 g/cm ³ |
| Gel time (ICON 002) (23°C - 2% MEKP M50 on 100 g) | 11 - 15 minutes |
| Non volatile content (ICON 003) | 52% |

3. PROPERTIES OF CAST GEL COAT

| | |
|---|----------|
| Flexural strength* (ISO 178) | 78.4 MPa |
| Flexural modulus* (ISO 178) | 4.48 GPa |
| Tensile strength* (ISO 527) | 57.7 MPa |
| Elongation at break* (ISO 527) | 3.4% |
| Temperature of deflection under load (HDT)* (ISO 75-3) | 102°C |
| Barcol hardness* | 45 |

* Mechanical tests carried out on 5 specimens of cast gel coat **GC 207** catalysed with 2% of MEKP M50, curing time at room temperature for 24 hours, then post cured for 3 hours at 80°C.

4. GEL TIME ACCORDING TO THE TEMPERATURE

Gel time done on 100g

| Temperature | 1% MEKP M50 | 1.5% MEKP M50 | 2% MEKP M50 | 2.5% MEKP M50 |
|-------------|-------------|---------------|-------------|---------------|
| 20°C | 42 min | 24 min | 13 min | 10 min |
| 25°C | 27 min | 16 min | 8 min | 7 min |
| 30°C | 22 min | 12 min | 7 min | 6 min |
| 35°C | 13 min | 8 min | 5 min | 4 min |

IMPORTANT

All of the results have been obtained during the tests in our laboratory. However, we can't be held responsible of manufactured parts with the **GC 207**, 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 occurred in this data sheet.

5. VERSIONS

Gel coat **GC 207** is available in the following colours: orange 2900, blue 5900, green 6900, black 9900 and clear 9901. Also available in brush version: **GC 206** (See technical data sheet).

Versions with the same characteristics:

| | |
|-------------|--------------------------------------|
| | GO207 |
| Description | Resistance of abrasion with corindon |

Versions with different characteristics:

| | |
|--|--|
| | GC207BV |
| Description | Low viscosity |
| Brookfield viscosity (ISO 2555 - 23°C) | 5 rpm : 75 - 125 Poise 50 rpm : 18 - 22 Poise |
| Temps de gel (ICON 002) (23°C - 2% PMEC M50 sur 100 g) | 11 - 15 minutes |

6. APPLICATION ADVICES

- Mix the product before use.
- Mix the peroxide well, never put under 1.25% or over 2.5%.
- We recommend to catalyze with 2% MEKP M50.
- Never apply the **GC 207** at temperature under 18°C.
- Apply 700 - 800 µm of **GC 207** wet on wet.
- Avoid excess thickness especially in angles. We recommend the application of several thin layers rather than a thick one. And we recommend to wait a few minutes between each layer.
- For mould production, we recommend to apply after the **GC 207** the resin **R 842** catalysed with 2% of MEKP M50. When the **R 842** is cured, start to laminate with a moulding resin like **R 2000**, **R 2000/50** or **R 2550**.

7. POST CURING

To obtain optimum resistance properties, the laminate with the gel coat **GC 207** 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 optimum results.

8. PACKAGING

Available in kegs of 5 kg, 25 kg and in drums of 200 kg.

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9. STORAGE CONDITIONS AND HANDLING

Shelf life: Gel coat **GC 207** is stable for 3 months from date of production. The product must be stored in its original closed packaging at a temperature between 15°C and 25°C, away from direct sunlight.

It is the responsibility of the customer to ensure that the product is used in good conditions before the use-by date mentioned on the keg.

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

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