

1 CHARACTERISTICS

The **R 172** is an hybrid isophthalic, thixotropic, pre-accelerated polyester resin with low viscosity.

- Contact or machine application,
- Very good chemical qualities and high heat resistance with a good resistance to yellowing,
- Very easily pigmented resin.
- Colour change mechanism to indicate state of cure

2 PROPERTIES OF THE LIQUID RESIN

Aspect	blue liquid.
Brookfield viscosity (ISO 2555 - 20°C – sp3)	5 rpm : 1500 - 2000 cP 50 rpm : 700 - 800 cP
Specific gravity (ICON 012)	1.10 g/cm ³
Gel time (ICON 002) (20°C – 2% MEKP on 100 g)	20 - 26 min
Non volatile content (ICON 003)	58 - 62%

3 MECHANICAL PROPERTIES OF THE CURED RESIN

Flexural strength * (ISO 178)	102 MPa
Flexural modulus * (ISO 178)	3.8 GPa
Tensile strength * (ISO 527)	80 MPa
Elongation at break * (ISO 527)	4%
Temperature of deflection under load * (HDT) (ISO 75-3)	75°C
Barcol hardness * (ASTM 2583)	45 - 50

*Mechanical tests realized on a laminated with 4 mats 450 g/m².
Post cure: 3 hours at 80°C.

4 CHARTS REACTIVITY

R172TPA

	1%	1.5%	2%	2.5%
15°C	66 min	45 min	29 min	27 min
20°C	41 min	25 min	20 min	17 min
25°C	26 min	16 min	13 min	11 min
30°C	18 min	12 min	9 min	8 min

Gel time realized on 100 g of resin.

IMPORTANT

All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the resin **NORESTER® 172**, 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.

5 VERSIONS

The **R 172** exists in **LGT** version with a gel time 36 - 40 minutes (20°C – 2% MEKP).

The **R 172** exists in **LGT TROPICAL** version with a gel time 55 - 65 minutes (20°C – 2% MEKP).

The **R 172** exists in paraffined version: **RF 172 FINITION**.

The **R 172** exists in stabilized light version: **SL**.

The **R172** exists in non pre accelerated version **NPA** with a gel time 20 - 26 min with 0.1% Co12% and 2 % M50 at 20°C.

The **R 172** exists in non pre accelerated and no thixo **NON_THIXONPA**.

The **R 172** exists in LGT version and no thixo **LGTONN_THIXO** with a gel time 35 - 45 minutes at 20°C with 1.5% M50.

The R172 exists in very thixo version TH with a viscosity of 5 rpm: 225 - 275 Poise and 50 rpm: 50 - 60 Poise and a gel time 18 - 22 min at 20°C and 2% M50.

The **R 172** exists in low viscosity version **BV** with a viscosity at 20°C at 5 rpm 1300 - 1500 cP and at 50 rpm 520 - 630 cP.

The **R 172** exists without blue indicator: **R172TPASANSRCBLEU**.

The **R 172** exists without blue indicator and in **LGT** version: **R172TPALGTSANSRC** with a gel time 36 - 40 minutes (20°C – 2% MEKP).

6 RECOMMENDATIONS BEFORE USE

- We recommend to mix the peroxide very well with a catalyst rate between 1% and 2%.
- Before use, check that the temperature of the mould, of the room and of the gel coat is between 18°C and 25°C.
- Mix the peroxide very well to obtain a homogeneous polymerisation.

7 PACKAGING

R 172 is available in kegs of 25 kg and in drums of 225 kg.

8 STORAGE CONDITIONS AND HANDLING

Storage life: **NORESTER® 172** resin 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.

This resin is subject to the Highly Flammable Liquids Regulations.

IMPORTANT

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