

# **TECHNICAL DATA SHEET**

# NORESTER® 710

**Resin RTM** NTR 105 F – 01/12/17

Page: 1/2

# 1 CHARACTERISTICS

The resin NORESTER® 710 is formulated from orthophtalic unsaturated polyester resin. It is pre-accelerated, thixotropic. It is specially formulated for RTM to obtain pieces with good surface finish aspect by reducing the fiber tracks.

- NORESTER® 710 cured at room temperature by addition an acetyl acetone peroxide or MEKP.
- Low viscosity for a good flow of the resin in the mould and a good wetting of reinforcements.
- Good curing to obtain short time of cycle.

## **2 PROPERTIES OF THE LIQUID RESIN**

Viscosity Brookfield (ISO 2555 - 23°C - sp3)	5 rpm : 900 - 1200 cP 50 rpm : 350 - 450 cP
Density (ICON 012)	1.23 - 1.27 g/cm <sup>3</sup>
Gel time (ICON 002) (23°C - 1.5% T44B on 100 g)	9 - 11 minutes
Solid content (ICON 003)	60 - 62%

## 3 MECHANICAL PROPERTIES ON CAST

Flexural strength* (ISO 178)	77 MPa
Flexural Modulus* (ISO 178)	4.82 GPa
Tensile strength* (ISO 527-4)	48.4 MPa
Allongement à la rupture* (ISO 527-4)	3.32%
Température de fléchissement sous charges* (HDT) (ISO 75-1)	83.2°C
Dureté Barcol* (ASTM 2583)	50

<sup>\*</sup>Mechanical test realized on cast of resin. Post curing 24 hours at ambient temperature and 3 hours at 80°C.

# 4 VERSIONS

The resin R710 is available in long gel time version, R710LGT with a gel time of 19 - 25 min (23°C - 1.5% T44B on 100g).

## **5 RECOMMENDATIONS BEFORE USE**

- Mix well the resin before use.
- Before use, check that the temperature of the mould, of the room and of the product is between 18°C and 25°C.
- To obtain an optimum curing the catalyst rate must be between 1% and 3%.

#### **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**<sup>®</sup>**710**, 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.



# **TECHNICAL DATA SHEET**

# NORESTER® 710

Resin RTM NTR 105 F - 01/12/17 Page: 2/2

### 6 PACKAGING

Available in kegs of 25 kg or drums of 225 kg.

## 7 STORAGE CONDITIONS AND HANDLING

Storage life: NORESTER®710 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**

All of the results obtained according to trials in our laboratory. However, we don't be responsible of manufactured parts with the resin **NORESTER**<sup>®</sup>**710**, 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.