

## ENYDYNE® C 40-8161 CT Unsaturated polyester resin

Version : October 2006

### APPEARANCE

- Charged liquid of color cream.

### MAIN RESIN CHARACTERISTICS

- DCPD unsaturated polyester resin.
- Very good glass wet-out.
- Low styrene emission
- Reduced fibre print trough

. Class LNE (French Laboratory):

Unsaturated polyester resin charged 4 glass fibre mats 450 g/m<sup>2</sup>  
Stick 3.4 mm : M2  
Stick 3.5 mm : F1

### MOULDING INFORMATION

- Hand lay up – Spray up
- Injection - Casting
- The final fire classification may depend on the structure and the conditions of use, so the final classification of the prototype manufactured must be validated before any mass production is carried out.
- Any dilution of the resin (thinning with another resin, addition of styrene-acetone) might reduce the fire classification greatly.
- Fillers naturally sediment out and this will be appreciable during storage at a high temperature, so pay special attention to storage conditions and always resuspend fillers by mixing the resin before any application, otherwise the final fire classification may not be uniform

### MAIN APPLICATIONS

- Industrial parts.

### LIQUID RESIN PROPERTIES

- Specific weight at 20°C : 1.49 g/cm<sup>3</sup>  
Brookfield viscosity RVT at 25°C  
spindle 3 at 50 rpm : 7 dPa.s  
volatile content : 26.5 %  
Reactivity :  
- Methode : R 91  
- Test temperature : 25°C  
- Catalyst system : 1.2 % MEKP 50  
: 0.15 Cobalt 6 %  
- Resin quantity : 150 g  
- Gel time : 10 min  
- Peak time : 25 min  
- Temperature at peak : > 45 °C

### NON REINFORCED CURED RESIN PROPERTIES

(Average values)

Mechanical properties

- Flexural ISO 178 :  
- Flexural strength : 62 MPa  
- Flexural modulus : 8400 MPa

Thermomechanical properties

- HDT ISO 75-2 A : 80°C

### **Mechanical properties on laminate with 30 % glass**

(Average values)

- Tensile ISO 527 :  
- Tensile strength : 101 MPa  
- Elongation at break : 2 %  
Flexural ISO 178 :  
- Flexural strength : 200 MPa  
- Flexural modulus : 11110 MPa

Thermomechanical properties

- HDT ISO 75-2 A : > 200°C

### DESIGNATION (according to ISO 3672-1)

ISO 3672-1 - UP,N6,O3/V7R7

### MARKING (according to ISO 11469)

>UP<

### SHELF LIFE

Use within shelf life specified on the container.

Store in the shade out of direct sunlight below 25 °C

Containers sealed

### SAFETY PRECAUTIONS FOR HANDLING AND STORAGE

- Polyester solutions contain volatile and flammable monomers such as styrene (flash point : 32°C).
  - They are subject to the Highly Flammable Liquids and Liquid Petroleum Gases Regulations 1972.
  - All polyester resins should be handled and used in well ventilated, flame proof areas.
- It is preferable to wear gloves and goggles to guard against any skin/eye irritation arising from the presence of styrene. Under no circumstances must accelerators be mixed with peroxide catalysts as it can cause explosions.

This data sheet was established according to NF T 50-063