# Technical data sheet

# **OPTIMOLD II MONOCOMPOSANT**

UPR



**Date sheet n°:** 2022 **Updated:** 10.10.17

#### **DESCRIPTION**

Pre-accelerated unsaturated polyester resin, filled and thixotropic. Cured using MEKP peroxide.

#### **APPEARANCE**

The product is ready to use. The product is available only in this grade.

#### **USE AREAS**

The product is recommended foruse in the manufacture of fibreglass reinforced moulds.

#### **APPLICATION**

This product is ready to use by application with airless spray equipment or by hand lay up.

Mix the product slowly but thoroughly for 10 minutes prior to each shift start up.

Check that the correct level of MEKP is added. A level of 1,5% w/w is recommended. Do not use more than 1.75% or lower than 1.25% w/w of MEKP catalyst.

To obtain the expected final properties , the exothermic reaction must be at least 43  $^{\circ}$  C.

Post cure for 24 hours at 45-50°C is recommended.

For further information please refer to supporting literature.

## **PROPERTIES / ADVANTAGES**

Due to its non shrinkage characteristics, dimensional stability is maintained during the curing cycle of the paste and resulting in a higher quality surface finish.

The product is easy to use with highly controlled rheological properties providing high resistance to sagging.

Higher mechanical properties with the laminate.

#### STORAGE / SHELF LIFE

Shelf-life: 4 Months.

When the product is sealed in its original packing, stored indoors away from direct sunlight and direct heat sources and ideally at ambient temperature between  $15^{\circ}\text{C}$  and  $25^{\circ}\text{C}$  .

## FEATURES OF LIQUID PRODUCT

Properties	Test method	Conditions	Unit	Typical values
Density	MT-C B 001 O	23°C	g/cm3	1,27 - 1,33
Solid content	MT-C U 001 C	15mn at 150°C	%	65 - 70
Viscosity	MT-C U T43 V	23°C - Spindle 3 - 50 rpm	mPa.s	1 100 - 1 600
Thixotropic index	MT-C U T43 V	5/50 rpm		3,2 - 4,0
Gel time	MT-C U 151 R	Catalyst : Low activity catalyst	min	18 - 22
Peak time	MT-C U 151 R		min	25 - 35
Peak exotherm	MT-C U 151 R	(250g - 25°C - 1,5% MEKP)	°C	170 - 190

### PROPERTIES OF THE CURED UNREINFORCED RESIN

Properties	Test method	Conditions	Unit	Typical values
H.D.T	ISO 75 - 2A (2013)	(3h at 80°C + 2h at 120°C)	°C	140
Tensil strengthStrength	ISO 527 (2012)	16h at 40°C	MPa	92
Elongation at break	ISO 527 (2012)	16h at 40°C	%	1,8

For all additional information, refer to the Safety Data Sheet no FP11890 available on our website.

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