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### **TECHNICAL INFORMATION**

# POLIMAL®

## **VE-3MM P INF**

#### Application

**Polimal® VE-3MM P INF** is the unsaturated polyester resin recommended for production of polyester-glass laminates, particularly for processing by RTM and infusion method.

#### Resin characteristics

**Polimal<sup>®</sup> VE-3MM P INF** is pre-accelerated, vinyl ester based resin, with low viscosity and very good wetting of glass fiber.

Typical parameters		
Parameter/Standard	Unit	Value
Viscosity at 25°C acc.to ISO 2555	mPa s	200 - 250
Gel time at 25°C acc. to DIN 16945	min	30 - 40
Temperature peak acc. to DIN 16945	°C	120 - 140
Flexural strenght acc. to ISO 178	MPa	134
Tensile strenght acc. to ISO 527	MPa	86
Tensile modulus acc. to ISO 527	MPa	3720
Elongation at breake acc. to ISO 527	%	6,0
Heat Deflection Temperature (HDT) acc. to ISO 75	°C	105
Barcoll hardness ASTM-D 2583-95	°B	43
Guarantee period	month	3

Gel time with: 2% Luperox® K-1 S

Mechanical parameters refer to not reinforced resin curing for 24 hours at room temperature and post curing for 4 hours at  $80^\circ$  + 4 hours at  $120^\circ$ C.

#### Storage conditions

**Polimal VE-3MM P INF** should be stored in close package in a dry, shady and cool places, adapted for storing flammable materials at temperatures not exceeding 25°C.

#### Processing conditions

The resin should be mixed before use. Good curing required ambient temperature above  $18^{\circ}$ C and low air humidity. The best curing conditions are obtained using 2% MEKP as hardener. It is possible to adjust gel time by varying of amount of hardener, the best within in the range of 1 - 2 %. The final curing could be optimalize by postcuring at elevated temperatures.

**Polimal**<sup>®</sup> is the trade name reserved for unsaturated polyester resins produced by **CIECH - Sarzyna S.A.** 

**Luperox**<sup>®</sup> is the trade name registered for products of **ARKEMA** company.

Data and suggestions included in this document are on the basis of our own tests and are considered by us as reliable. However, we cannot take any responsibility for actions and losses directly or indirectly resulted from using our products. User should check the product quality, safety and properties before its using.

#### Note:

The information does not substitute Material Safety Data Sheet or Technical Specification, which are superior documents and are available on the customer's request.

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