



NUMBER: IT/UPR/206

DATE: 20.11.2018

### **TECHNICAL INFORMATION**

# **POLIMAL**®

# 103 AWTP-1

#### **Application**

**Polimal**® **103 AWTP-1** is recommended for production of laminates by hand lay-up or spray lay-up.

### **Resin characteristics**

**Polimal**® **103 AWTP-1** is constructional, orthophthalic, unsaturated polyester resin. It is thixotropic, pre-accelerated with colourful curing indicator and low styrene emission.

### **Typical parameters**

Parameter	Unit	Value
Viscosity at 25°C Brookfield, sp.21/rpm.100 acc. to ISO 3219	mPa s	220 ÷ 350
Gel time at 25°C acc. to DIN 16945	min	10 ÷ 20
Tensile strength acc. to ISO 527	MPa	70
Flexural strength acc. to ISO 178	MPa	120
Flexural modulus acc. to ISO 178	MPa	3600
Impact strength acc. to ISO 179	kJ/m²	8
Elongation at break acc. to ISO 527	%	3,5
Heat deflection temperature (HDT) acc. to ISO 75	°C	55
Barcol hardness ASTM –D 2583-95	°В	44
Guarantee period	months	3

Gel time with: 2% Luperox® K-1S (MEKP)

Mechanical parameters refer to not reinforced resin cured for 24 hours at room temperature and post cured for 2 hours at 80°C.

## Storage conditions

**Polimal**® **103 AWTP-1** 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**® is the trade name reserved for unsaturated polyester resins produced by **CIECH - Sarzyna S.A.** 

**Luperox**® 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.