

**TECHNICAL INFORMATION**

# POLIMAL<sup>®</sup>

# 103 AWTP-1

**Application**

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

**Resin characteristics**

**Polimal<sup>®</sup> 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
<b>Viscosity at 25°C</b> Brookfield, sp.21/rpm.100 acc. to ISO 3219	mPa s	<b>220 ÷ 350</b>
<b>Gel time at 25°C</b> acc. to DIN 16945	min	<b>10 ÷ 20</b>
<b>Tensile strength</b> acc. to ISO 527	MPa	<b>70</b>
<b>Flexural strength</b> acc. to ISO 178	MPa	<b>120</b>
<b>Flexural modulus</b> acc. to ISO 178	MPa	<b>3600</b>
<b>Impact strength</b> acc. to ISO 179	kJ/m <sup>2</sup>	<b>8</b>
<b>Elongation at break</b> acc. to ISO 527	%	<b>3,5</b>
<b>Heat deflection temperature (HDT)</b> acc. to ISO 75	°C	<b>55</b>
<b>Barcol hardness</b> ASTM –D 2583-95	°B	<b>44</b>
<b>Guarantee period</b>	months	<b>3</b>

**Gel time with: 2% Luperox<sup>®</sup> 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<sup>®</sup> 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°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 optimize 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.