

**TECHNICAL INFORMATION**

# POLIMAL<sup>®</sup>

# 104 AWTP

**Application**

**Polimal<sup>®</sup> 104 AWTP** is a resin with increased thermal resistance, designed for the production of polyester – glass laminates by hand lay-up or spray lay-up.

**Features**

**Polimal<sup>®</sup> 104 AWTP** is accelerated, thixotropic, orthophthalic unsaturated polyester resin with colorful curing indicator system and low styrene emission. It is recommended to production of laminates with thickness to 5 mm. The resin meets requirements of **DIN 16946/1 type 1140**.

Advantages of using:

- good wetting of fiberglass,
- favourable curing characteristic,
- good mechanical parameters, especially thermal resistance (HDT) and flexural strength.

**Typical parameters**

Parameter	Unit	Value
<b>Viscosity 25°C</b> acc. to ISO 3219	mPa s	<b>250 ÷ 350</b>
<b>Gel time at 25°C</b> acc. to ISO 2535	min	<b>10 ÷ 20</b>
<b>Compressive strength</b> acc. to ISO 604	MPa	<b>120</b>
<b>Stress at break</b> acc. to ISO 527	MPa	<b>80</b>
<b>Flexural modulus</b> acc. to ISO 178	MPa	<b>3600</b>
<b>Impact strenght</b> acc. to ISO 179	kJ/m <sup>2</sup>	<b>10</b>
<b>Elongation at break</b> acc. to ISO 527	%	<b>3,0</b>
<b>Heat deflection temperature (HDT)</b> acc. to ISO 75	°C	<b>min. 90</b>
<b>Barcol hardness</b> ASTM –D 2583-95	°B	<b>40</b>
<b>Guarantee period</b>	month	<b>3</b>

**Gel time with: 2% Luperox<sup>®</sup> K-1S**

Mechanical parameters refer to unreinforced resin cured for 24 hours at room temperature and post curing for 4 hours at 80°C.

**Storage conditions**

**Polimal<sup>®</sup> 104 AWTP** 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.