

TECHNICAL INFORMATION

POLIMAL®

144-011

Application

Polimal® 144-011 is recommended for the production of resinous – mineral castings.

Resin characteristics

Polimal® 144-011 is constructional, not accelerated, terephthalic, unsaturated polyester resin with good mechanical and processing parameters.

Advantages of using:

- low viscosity,
- good mixing with mineral fillers.

Typical parameters

Parameter	Unit	Value
Viscosity at 25°C Brookfield, sp.21/100rpm acc. to ISO 3219	mPa s	100 ÷ 150
Gel time at 25°C acc. to DIN 16945	min	4 ÷ 8
Flexural strength acc. to ISO 178	MPa	100
Tensile modulus acc. to ISO 527	MPa	3100
Impact strength acc. to ISO 179	kJ/m ²	15
Elongation at break acc. to ISO 527	%	3,5
Heat deflection temperature (HDT) acc. to ISO 75	°C	60
Barcol hardness ASTM –D 2583-95	°B	40
Guarantee period	months	3

Gel time with: 1% Co1% + 2% Luperox® K-1 S (MEKP)

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

Storage conditions

Polimal® 144-011 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 in original packages. The resin and fillers should be seasoned before use at 18°C and humidity of 70%, minimum. The favorable curing conditions are reached by using 2% of MEKP hardener. It is possible to adjust gel time by varying of amount of cobalt accelerator in the range of 0,4 – 2,5% and hardener, the best within the range of 1 – 2 %. The final curing could be optimize 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.