

TECHNICAL INFORMATION

POLIMAL[®]

1091 PS

Application

Polimal[®] 1091 PS is recommended for the production of fiberglass-reinforced and/or mineral filler-reinforced polyester goods.

Resin characteristics

Polimal[®] 1091 PS is constructional, accelerated, orthophthalic, unsaturated polyester resin with addition of titanium dioxide. It is characterized by very good processing and mechanical parameters. Its advantage is good wetting of fiberglass and mineral fillers.

Typical parameters

Parameter	Unit	Value
Viscosity at 25°C acc. to ISO 3219	mPa s	130 ÷ 160
Gel time at 25°C acc. to ISO 2535	min	3 ÷ 8
Flexural strength acc. to ISO 178	MPa	110
Tensile strength acc. to ISO 527	MPa	70
Tensile modulus acc. to ISO 527	MPa	4300
Elongation at break acc. to ISO 527	%	2,0
Heat deflection temperature (HDT) acc. to ISO 75	°C	63
Barcol hardness ASTM -D 2583-95	°B	45
Guarantee period	months	3

Gel time with: 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[®] 1091 PS 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[®] 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.