

APPLICATION METHOD

Letoxit® PR 131 +

Letoxit® EM 247 + Letoxit® EM 300

Version: 11/2011

Description

The system for casting is composed of three components:

resin Letoxit PR 131
curing agent Letoxit EM 247
accelerator Letoxit EM 300

The main advantages are:

- long pot-life at room temperature
- low shrinkage
- low temperature during exothermal reaction

After curing the composition has good mechanical, electrical and heat properties.

Usage

System is intended to be used for processing RIM technologies and conventional casting process. It is suitable for produce of electroinsulation components (e.g. parts of electroinstalation, insulators, power, voltage and current and transformers) for medium and high voltage outdoor applications.

Resin specification

	Norm	Resin Letoxit® PR 131
Density at 25°C (g/cm ³)	PN-5M-11	1,15-1,16
Viscosity at 25°C (mPa.s)	PN-5M-01	9000-13000
Epoxy equivalent	PN-5M-20	195-200
Storage	-	12 months

Hardeners specification

Modified anhydride of dicarboxyle acid

	Norm	Hardener Letoxit® EM 247
Viscosity at 25°C (mPa.s)	PN-5M-01	50-70
Hardener equivalent	-	166

Mixture ratio

	Letoxit® PR 131 + Letoxit® EM 247 + + Letoxit® EM 300
Parts by weight	100 : 80 : 0,2 - 2,0

Mechanic, thermomechanic, electric and physical properties



Na Záhonech 1177
686 04 KUNOVICE
Czech Republic

tel: +420 572 433 711
fax: +420 572 433 700
email: 5M@5M.cz

www.5M.cz
LETOXIT® is registered trademark of 5M s.r.o.

APPLICATION METHOD

Letoxit® PR 131 +

Letoxit® EM 247 + Letoxit® EM 300

Version: 11/2011

Cured testing samples conditions: 4h - 80°C + 8h - 140°C

Comosition: 100 parts by weight of Letoxit PR 131

80 parts by weight of Letoxit EM 247

1 part by weight of Letoxit EM 300

	Norm	Value
Flexural strength (MPa)	ČSN 640607	131 - 141
Tensile strength (MPa)	ČSN 640605	51 - 61
Impact strength (mJ/mm²)	DIN53453	26 - 36
Compression strength (MPa)	ČSN 640606	125 - 135
HDT (°C)	DIN 53458	100 - 110
Glass transition temperature(°C)	DTA	105 - 115
Coefficient of linear thermal expansion (10⁻⁶/K)	DIN 53752	50 - 60
Thermal conductivity (W/mK)	DIN 52812	0,2 - 0,3
Water absorption 24h/20°C (%)	ČSN 420112	0,25 - 0,35
Specific internal electrical resistance (ohm.cm)	DIN 53482	10 ¹⁵
Specific surface electrical resistance (ohm)	DIN 53482	10 ¹³
Dielectric strength (KV/mm)	ČSN 346463	22 - 25
Dielectric constant 25°C, 50Hz	ČSN 346466	3,2 - 3,4

Mechanic, thermomechanic, electric and physical properties

Cured testing samples conditions: 4h - 80°C + 8h - 140°C

Comosition: 100 parts by weight of Letoxit PR 131

80 parts by weight of Letoxit EM 247

1 part by weight of Letoxit EM 300

290 parts by weight of silica sand SUK20

	Norm	Value
Flexural strength (MPa)	ČSN 640607	110 - 125
Tensile strength (MPa)	ČSN 640605	70 - 801
Elongation at break (%)	ISO 527	1,0 – 1,3
Impact strength (mJ/mm²)	DIN53453	7 - 10
Compression strength (MPa)	ČSN 640606	140 - 160



Na Záhonech 1177
686 04 KUNOVICE
Czech Republic

tel: +420 572 433 711
fax: +420 572 433 700
email: 5M@5M.cz

www.5M.cz
LETOXIT® is registered trademark of 5M s.r.o.

APPLICATION METHOD

Letoxit® PR 131 +

Letoxit® EM 247 + Letoxit® EM 300

Version: 11/2011

HDT (°C)	DIN 53458	105 - 120
Glass transition temperature(°C)	DTA	105 - 125
Coefficient of linear thermal expansion (10⁻⁶/K)	DIN 53752	30 -50
Thermal conductivity (W/mK)	DIN 52812	0,8 - 0,9
Water absorption 24h/20°C (%)	ČSN 420112	0,1 - 0,15
Specific internal electrical resistance (ohm.cm)	DIN 53482	10 ¹⁵
Specific surface electrical resistance (ohm)	DIN 53482	10 ¹³
Dielectric strength (KV/mm)	ČSN 346463	18 - 20
Dielectric constant 25°C, 50Hz	ČSN 346466	4,0 – 4,2

Packing

Resins and hardeners as well are supplied in PE containers in volume 5, 10 or 20 kg and also in 200 kg drums.