

Description:	Relicon® PUR 112 FR is halogen- free , flame- retardant, universally applicable two- component polyurethan cast resin for the low- and middle- voltage range. Relicon® PUR 33 has the classification of LMP-W, LI-W, MMP-W and MI-W according to CENELEC HD 631.1 S2. After hardening, Relicon® PUR 112 FR is characterised by its outstanding high mechanical strain as well as by its resistance to dampness and atmospheric corrosion.		
Application:	Mechanical protection and electrical insulation for low- and middle- voltage joints indoors and outdoors as well as for casting under water.		
Properties:	Excellent flow behaviour Ready for use immediately In a practical, transparent two- chamber pouch Very hydrophobic, can harden in water Excellent hydrolytic stability Little volume shrinkage Excellent adhesion on all plastic cables and wires Low exothermic reaction temperature Halogen-free Good hardening even at low temperatures No dangerous waste with homogeneous mixing of the resin SVHC- free (contains no dangerous substances) Safe filling thanks to SF-System flame- retardant UL94 V0		
Tests:	certified according to CENELEC HD 631.1 S2 certified according to DIN EN 50267-2-1 certified according to DIN EN 50267-2-2 (VDE 0472 Teil 813) certified according to IEC 60332-1 (VDE 0472 Teil 804B) certified according to IEC 60331 (VDE 0472 Teil 814)		
Processing properties:	Mixing ratio:	A:B	100:22
	Pot time	bei 5°C	50 min.
		bei 23°C	15 min.
		bei 40°C	5 min.
	Gel time	bei 5°C	70 min.
		bei 23°C	20 min.
		bei 40°C	8 min.
Physical properties:	Comonent A (resin)		
	Density at 20°C	1,6 g/cm³	DIN EN ISO 2811-2
	Viscosity at 25°C	2500 mPa*s	EN ISO 2555
	Comonent B (hardener)		
	Density at 20°C	1,24 g/cm³	DIN EN ISO 2811-2
	Viscosity at 25°C	210 mPa*s	EN ISO 2555
	Mixed cast resin		
	Density at 20°C	1,52 g/cm³	DIN EN ISO 2811-2
	Viscosity at 5°C	3000 mPa*s	EN ISO 2555
	Viscosity at 23°C	1500 mPa*s	EN ISO 2555
	Max. exothermicity	~ 70°C	HD 631.1 S2
	Hardening under water, gas volume	<1 ml	HD 631.1 S2
	Volume shrinkage	2,1%	EN ISO 3521
	Dielectric strength	20 kV/mm	EN 60243-1
Mechanical properties: (hardened)	Temperature resistance	-25 / +130°C	
	Shore hardness D	82	EN ISO 868
	Tensile strength	21 MPa	EN ISO 527
	Ultimate strain	3%	EN ISO 527
	Impact resistance (without indentation)	>8 kJ/m²	EN 60243-1
Electrical properties: (hardened)	Volume resistance 23°C	8*10 ¹⁴ Ω*cm	IEC 60250
	Volume resistance 80°C	2,3*10 ¹¹ Ω*cm	IEC 60250
	Dielectric strength 23°C	>20 kV/mm	EN 60243-1
	Dielectric strength 80°C	>20 kV/mm	EN 60243-1
	Lost factor 23°C 50Hz	< 0,04	IEC 60250
	Lost factor 80°C 50Hz	< 0,11	IEC 60250
	Dielectric constant 23°C	< 5	IEC 60250
	Dielectric constant 80°C	< 7	IEC 60250

**Electrical properties after immersion
in water for 28 day at 70°C:**

Dielectric strength 23°C	20 kV/mm	EN 60243-1
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flame- retardant properties:

Flammability	V0 (2mm)	UL94
Halogen substance	< 0,1%	EN 50267-2-1
conductive flue gas	5,21 µS/mm	EN 50267-2-2
Acidity flue gas (pH-value)	5,7	EN 50267-2-2

Usage information:

The resin is delivered in a transparent two- chamber plastic pouch. Both components are separated by a middle seam. In order to protect the resin from dampness and the thereby guarantee optimal durability of the products, the transparent plastic pouch is shrink-wrapped in a paper pouch laminated with aluminium. Further instructions for use and processing can be found on this data sheet or on the product packaging.

Storage:

Das Relicon® PUR 112 FR must be stored in a protective aluminium pouch at ambient temperatures of between 5°C and 40°C. When stored appropriately, the product can be stored for 36 months. The expiry date can be found on the product packaging.

Safety information:

Safety information relating to the potential effects on health, safe handling, storage, usage and disposal of the product can be found on our product- specific safety data sheet.

Article- No.	Typ	ml / g
435-01100	PUR112 FR 95	95 / 144
435-01101	PUR112 FR 165	165 / 251
435-01102	PUR112 FR 220	220 / 334
435-01103	PUR112 FR 240	240 / 365
435-01104	PUR112 FR 400	400 / 608
435-01105	PUR112 FR 455	455 / 692
435-01106	PUR112 FR 490	490 / 745
435-01107	PUR112 FR 655	655 / 996
435-01108	PUR112 FR 955	955 / 1452
435-01109	PUR112 FR 1140	1140 / 1733
435-01110	PUR112 FR 1445	1445 / 2196
435-01111	PUR112 FR 1640	164 / 2493
435-01112	PUR112 FR 1950	1950 / 2964
435-01113	PUR112 FR 2045	2045 / 3108

