

L720-LCB-05

Iso/NPG resin for UV-Cure CIPP/Relining

L720-LCB-05 is an unsaturated polyester resin based on Isophthalic acid and NPG, and is MgO thickenable.

When a photo initiator system is added, the resin can be cured with both conventional curing agents and low energy UV-Light (365 - 420 nm).

Liners made from L720-LCB-05 provide enhanced chemical resistance and improved mechanical properties vs. standard Iso resins.

Benefits

- Enhanced chemical resistance
- Great mechanical strength and resilience
- Fast installation (when equipped with a photo initiator system), curable through UV light
- Can be used with glass liners (MgO thickenable)

Major Applications

L720-LCB-05 is suitable for the production of glassfiber reinforced parts with excellent mechanical properties, which require outstanding chemical resistance and electrical properties.

Examples include CIPP, tanks, vessel, hydraulic engineering, pipes, boats, corrosion protection and electrical industry.

Certifications and Approvals

Cured unreinforced L720-LCB-05 conforms to type 1140 according to DIN 16946/2 and is classified in group 3 according DIN 18820/1. According EN 13121, parts 1 and 2 the resin is classified in group 4.

Product Specifications

Property	Value	Unit	TM
Appearance	Clear; Sl. Hazy		TM 2265
Solids content	54 - 58	%	TM 2033
Solids content	54 - 58	%	TM N378.01
Viscosity 25 °C, Brookfield	725 - 825	mPa.s	TM 7000

Viscosity @ 25°C, RVF Brookfield Spindle #3 @ 20 rpm.

Liquid resin typical properties

Property	Value	Unit	TM
Density 23 °C	1100	kg/m ³	TM 2160
Flash point	33	°C	TM 2800
Stability (no initiator, dark, 25°C)	6	month	
Styrene content	44	%	

Unfilled castings typical properties

Property	Value	Unit	TM
Density 23 °C	1100	kg/m ³	TM 2160
Tensile strength	87	MPa	ISO 527-2
Tensile modulus	3.4	GPa	ISO 527-2
Elongation at break	4.3	%	ISO 527-2
Flexural strength	147	MPa	ISO 178
Flexural E-Modulus	3.5	GPa	ISO 178
Outer fiber strain	5.5	%	ISO 178
HDT	96	°C	ASTM D648
Tg	120	°C	ISO 537

Cure: 1.0 g cobalt accelerator (1%) + 1.0 g MEKP in 100 g resin.

Post cure: 24 h Rt + 24 h 100°C

Application Guidelines

L720-LCB-05 can be cured with low energy UV-light (wave length 365 – 420 nm) when a foto initiator system is added or conventionally with usual curing agents.

Before use, the resin should be conditioned at 15°C minimum by use of a conventional curing system.

Storage Guidelines

The resin should be stored indoors in a dry place at temperatures between 5°C and 30°C, in the original, unopened, 100% light-tight and undamaged packaging.

The properties of the resin may change slightly during storage. Shelf life is shorter at higher temperatures.

Material Safety

A Safety Data Sheet (SDS) of this product is available on request.

Test Methods

Test methods (TM) referred to in the table(s) are available on request.

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Contact us for more information

We will help you to choose the right resin solution.

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