



**JOHN
WINTER**
WORKING BETTER TOGETHER

FAST CAST RESIN DATA (REV.3)

ELANTAS FAST CAST RESIN DATA

Resin Type	Fast Cast Pouring Resin	Fast Cast Pouring Resin	Polyurethane Paste Jointing Compound		Epoxy Resin Abrasion Resistant for Core Boxes/ Tools	
Resin Grade	PC25 Resin + G226 + EF35 Filler	PU466 Resin + G106 Hardener +EF35 Filler	MS252NF Resin +W252 Hardener (Blue)	MS252NF Resin +W242 Hardener (Grey)	MG544 Resin +K09N Hardener (Fast Cure)	MG544 Resin +W501N Hardener (Slow Cure)
Mixing Ratio (by weight)	1 : 1 : 3	1 : 1 : 4	100 : 12	100 : 10	100 : 9	100 : 9
Maximum Exothermic Peak	60C	45C	60C	50C	135C	110C
Gel Time	4 – 5 mins	5 – 7 mins	40 – 50 mins	45 – 55 mins	12 – 18 mins	26 – 34 mins
Strip Time	50 – 70 mins	1hr 30 – 2hrs	18 – 24 hrs	18 – 24 hrs	115 - 125 mins	145 - 160 mins
Post Curing Time (thickness dependent)	2 – 4 hours	4 – 6 hours	10 -15 hrs	10 – 15 hrs	15 hrs	15 hrs
Machineability	Good	Good	Good	Good	Unmachinable	Unmachinable
Colour	White	White	Grey/ Blue	Grey	Blue	Blue
Max Thickness (recommended)	70mm	60mm	25mm	25mm	Not available	Not available
Max Flexural Strength	55 MN/m ²	36 MN/m ²	76MN/m ²	55MN/m ²	Not available	Not available
Max Tensile Strength	34MN/m ²	25MN/m ²	26MN/m ²	28MN/m ²	Not available	Not available
Elongation on Tensile	1.2%	1.5%	1.2%	2.6%	Not available	Not available
Max Operating Temp	Not available	50C	55C	45C	95C	100C
Max Hardness (Shore)	85	82	84	82	94	94

ELANTAS FAST CAST RESIN APPLICATIONS

Resin Type	Best Suited Applications
<p>PC25 Resin + G226 + EF35 Filler</p>	<p>Polyurethane fast setting liquid resin used to manufacture durable Foundry Patterns and Core Boxes. It's rapid setting. Starts to cure in 4-5 minutes. Its very hard when fully cured offering little flex with high strengths. Sands and machines well. Also well suited to bonding together sheets of model board prior to cutting on CNC.</p>
<p>PU466 Resin + G106 Hardener +EF35 Filler</p>	<p>Polyurethane liquid resin used to manufacture durable Foundry Patterns and Core Boxes. It has a cure time slightly slower than PC25/G226, 5-7 minutes. It has slightly lower strengths but better flex characteristics so less prone to cracking. Sands and machines well.</p>
<p>MS252NF Resin +W252 Hardener (Blue)</p>	<p>An epoxy paste with glass fibres used for the production of Foundry Patterns, Negatives and as a Filler/ Jointing Compound. W252 Hardener produces a 40-50 minutes gel time. The final cured product is very hard, high strength with little flex. Easy to mould and roll into various shapes.</p>
<p>MS252NF Resin +W242 Hardener (Grey)</p>	<p>An epoxy paste with glass fibres used for the production of Foundry Patterns, Negatives and as a Filler/ Jointing Compound. W242 Hardener is slightly slower to gel, 45-55 minutes. The final cured product is hard and strong but has better flexible characteristics than hardener W252. Easy to mould and roll into various shapes.</p>
<p>MG544 Resin +K09N Hardener (Fast Cure)</p>	<p>An abrasion & chemical resistant epoxy resin for Foundry Patterns and Coreboxes that are very prone to sand erosion. K09N Hardener has a gel time of 12-18 minutes. Very resistant to post sanding or machining.</p>
<p>MG544 Resin +W501N Hardener (Slow Cure)</p>	<p>An abrasion & chemical resistant epoxy resin for Foundry Patterns and Coreboxes that are very prone to sand erosion. W501N Hardener has a slower to gel time of 26-34 minutes. Very resistant to post sanding or machining.</p>