Raise your expectations of thermosets

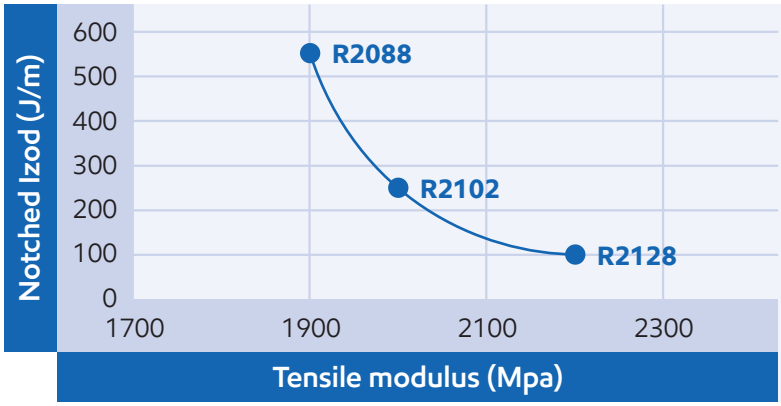
Unlocking Reaction Injection Molding (RIM) potential with Proxxima™ polyolefin thermoset resin systems

Proxxima™ resin systems are a new family of two-component liquid systems formulated to optimize process and product performance in RIM production. This versatile portfolio of systems is designed to open new horizons in RIM with polyDCPD.

Proxxima™ systems for RIM address a broad range of mechanical properties

Includes the recently added grades, high toughness Proxxima™ R2088 and high temperature resistance Proxxima™ R2128.

			Proxxima™		
	Standard	Unit	R2102	R2088	R2128
Initial viscosity	Internal	cP	230	254	480
Tensile strength	ASTM D638	MPa	48	43	61
Tensile modulus	ASTM D638	MPa	2000	1900	2200
Notched Izod (fresh samples)	ASTM D256	J/m	260	530	100
Water absorption	ASTM D570	Wt.%	0.04	0.02	0.03
Elongation at yield	ASTM D638	%	2.7	4.0	3.0
Elongation at break	ASTM D638	%	33	38	21
Glass transition	ASTM E1356	°C	139	131	184

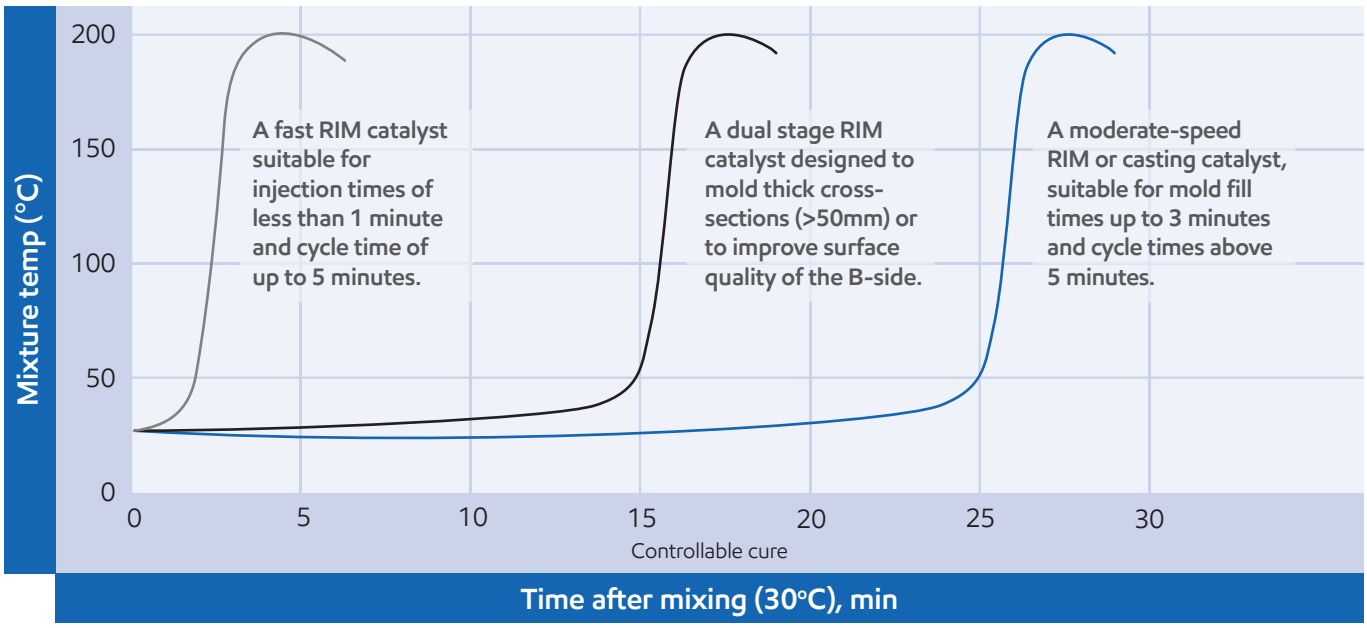


Proxxima™ resin systems offer a balance of essential properties such as high impact toughness and modulus.

Low system viscosity and controllable cure rate enable production of parts with complex geometric features for a variety of applications, allowing process optimization and reduction of tooling and assembly costs.

Proxxima™

Proxxima™ systems offer tunable cure rate to best match your process needs



Proxxima™ systems for RIM address a broad range of mechanical properties

It's the material of choice for producing long-lasting parts intended for use in acidic or alkali environments, resulting in longer life and lower cost of inspections and maintenance.

Chemical	Temperature	12 Month
Sulfuric acid (50%)	60 °C	Pass
Sodium hypochlorite (15%)	60 °C	Pass
Chlorine dioxide (3 g/L)	60 °C	Pass
Phosphoric acid (70%)	90 °C	Pass
Sodium hydroxide (50%)	90 °C	Pass
Hydrochloric acid (30%)	90 °C	Pass
Propylene glycol	90 °C	Pass

Vessels made with Proxxima™ resins in a RIM process provide 9+ year service life in caustic environment of chlor-alkali electrolysis.

Polymer performance
Test method: ASTM C581-15
Pass: <5% decrease in properties

Contact us to discover how Proxxima™ resin systems can help you bring innovation to your business.

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