



PRODUCT **SELECTOR GUIDE**





Material Name	RDN - 112 Balanced	RDN - 113 Fast Cure	RDN - 114 High Performance	RDN - 115 Smart-cost	RDN - 212 Innovative Tooling
Type of resin system	Toughened epoxy	Rapid-cure toughened epoxy	High toughened epoxy	Toughened epoxy	Epoxy
Application	General aviation, Helicopters, AAM, UAVs, Aerospace secondary structures	AAM, UAVs, Automotive & Sport	Aerospace Primary & Secondary structures	Marine, Industrial use, Automotive & Sport	Innovative tooling
Cure temp, °C	90 – 130	120 - 150	130-180	80-120	45-60
Cure time, h	1 - 6	15 min	3	1 - 6	18 - 50
Tg dry °C onset (peak) by DMA	144 (164)	148 (173)	149 (185) - 182 (214)	126 (140)	235 (254)
Prepreg Out-Life at 21°C, days	60	45	45	60	9
Key Features	High mechanical properties, Long prepreg out life	Rapid-cure, toughened	High mechanical properties, excellent damage tolerance	Low cure temperature, Long prepreg out life	Low volatiles (hot-melt), low cure temperature

MANUFACTURING PROCESS

PROCESS	MATERIAL				
	RDN - 112	RDN - 113	RDN - 114	RDN - 115	RDN - 212
Autoclave, Press	✓	✓	✓	✓	✓
Out-of-autoclave	✓		✓	✓	
Hand lay-up	✓	✓	✓	✓	✓
ATL	✓		✓		
AFP	✓		✓		

INDUSTRY APPLICATIONS

INDUSTRY	MATERIAL				
	RDN - 112	RDN - 113	RDN - 114	RDN - 115	RDN - 212
Aerospace	✓		✓		
General Aviation	✓		✓		
Air mobility	✓	✓	✓		
UAVs & Drones	✓	✓			
Automotive & Motorsport	✓	✓		✓	
Marine		✓		✓	
Sports & Leisure		✓		✓	
Tooling					✓

RYDNA CARBON | GLASS EPOXY PREPREG SOLUTIONS

RDN-112 Balanced - Toughened Epoxy Resin System

Cost-effective, versatile choice with OOA capability.

Manufacturing Processes

- Compatible with autoclave and out-of-autoclave (OOA) processing.
- Flexible cure range: from 90 °C to 130 °C.
- Cure time: from 60 min.
- Controlled resin flow.
- Excellent tack and drape characteristics.
- Suitable for hand lay-up, ATL and AFP.
- Prepreg Out-Life > 60 days at 21 °C.

Key Features

Tg: up to 164 °C.

High mechanical properties and damage tolerance.

Applications

Aerospace secondary structures.



RYDENA CARBON | GLASS EPOXY PREPREG SOLUTIONS

RDN-113 Fast Cure - Toughened Epoxy Resin System

Designed for automotive and industrial applications, where both high-rate manufacturing and high performances are required.

Manufacturing Processes

- Compatible with autoclave and hot-in/hot-out press molding.
- Flexible cure range: from 120 to 150 °C.
- Prepreg Out-Life: > 45 days at 21 °C.

Key Features

Tg: up to 173 °C.
Fast cure: from 15 min maximizing press throughput.

Applications

Automotive, and Sporting goods.



RYDNA CARBON | GLASS EPOXY PREPREG SOLUTIONS

RDN-114 High Performance - High Toughened Epoxy Resin System

Maximum performance engineered for demanding environments.

Manufacturing Processes

- Compatible with autoclave and out-of-autoclave (OOA) processing.
- Flexible cure range: from 130 °C to 180 °C
- Controlled resin flow.
- Excellent tack and drape characteristics.
- Suitable for hand lay-up, ATL and AFP.
- Prepreg Out-Life > 45 days at 21 °C.

Key Features

Tg: up to 214 °C.

High mechanical properties and excellent damage tolerance.

Applications

Aerospace primary and secondary structures.



RYDENA CARBON | GLASS EPOXY PREPREG SOLUTIONS

RDN-115 Smart Cost Manufacturing - Modified Epoxy Resin System

Low cure temperature for cost-efficient OOA and autoclave manufacturing solutions.

Manufacturing Processes

- Compatible with autoclave and out-of-autoclave (OOA) processing .
- Flexible cure range: from 80 °C to 120 °C.
- Cure time: from 60 min.
- Prepreg Out-Life: > 60 days at 21 °C.

Key Features

Tg: up to 140 °C.
Controlled resin flow.

Applications

Marine, Industrial applications
and Prototyping.



RYDNA CARBON | GLASS EPOXY PREPREG SOLUTIONS

RDN-212 Innovative Tooling - Epoxy Resin System

For high-temperature tools using low-cost master molds.

Manufacturing Processes

- Initial cure: from 45 °C.
- Post-cure: 2h at 200 °C.
- Prepreg Out-Life: > 9 days at 21 °C.

Applications

Molds and Tools.

Key Features

Tg: up to 254 °C.

Service temperature: up to 220 °C after post-cure..

Low prepreg volatile content due to hot-melt
(no solvent) formulation..



www.rydena.com

FOR THE SKIES AND BEYOND

