

# RILSAN® CLEAR G820 RNEW®

## PA,,MHT,C14-020

Rilsan® Clear G820 Rnew® is a high performance transparent polyamide with outstanding chemical resistance and stress cracking resistance. This grade has been designed for injection molding applications.

According to ASTM D6866, the biobased carbon content is measured at 62%.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>RHEOLOGICAL PROPERTIES</b>			
Melt Volume-Flow Rate	8 / *	cm <sup>3</sup> /10 min	ISO 1133
Temperature	275 / *	°C	-
	527 / *	°F	
Load	2.16 / *	kg	-
	4.76 / *	lb	
Molding Shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	0.7 / *	%	ISO 294-4, 2577
<b>MECHANICAL PROPERTIES</b>			
Tensile Modulus	- / 1665	MPa	ISO 527-1/-2
	- / 241000	psi	
Yield Stress	- / 66	MPa	ISO 527-1/-2
	- / 9570	psi	
Yield Strain	- / 7	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Shore D Hardness, after 15 s	76 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / 6	kJ/m <sup>2</sup>	ISO 179/1eA
	- / 2.85	ftlb/in <sup>2</sup>	
Charpy Notched Impact Strength, -30°C	- / 9	kJ/m <sup>2</sup>	ISO 179/1eA
	- / 4.28	ftlb/in <sup>2</sup>	
<b>THERMAL PROPERTIES</b>			
Glass Transition Temperature, 10°C/min	101 / *	°C	ISO 11357-1/-2
	214 / *	°F	
Temp. of Deflection Under Load, 1.80 MPa	73 / *	°C	ISO 75-1/-2
	163 / *	°F	

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Temp. of Deflection Under Load, 0.45 MPa	85 / *	°C	ISO 75-1/-2
	185 / *	°F	

## OTHER PROPERTIES

%Bio-Based	62	-	ASTM D6866
Water Absorption, 23°C, immersion, equilibrium	2.45 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	1.16 / *	%	ISO 62
Density	1000 / 1000	kg/m <sup>3</sup>	ISO 1183
	1 / 1	g/cm <sup>3</sup>	

## OPTICAL PROPERTIES

Luminous Transmittance	92	%	ISO 13468-1, -2
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## MAIN APPLICATIONS:

- Optic
- Electronics
- Domestic appliances

## PACKAGING:

This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

## SHELF LIFE:

Two years from the delivery. For any use above this limit, please refer to our technical services.

### Processing conditions:

- Typical melt temperature (Min / Recommanded / Max) : 260°C / 280°C / 300°C
- Typical mold temperature : 20 - 80 °C
- Drying time and temperature (only for bags opened for more than two hours): 4 - 6 hours at 80°C

<b>PROCESSING</b>	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com
<b>DELIVERY FORM</b>	Pellets
<b>SPECIAL CHARACTERISTICS</b>	Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
<b>REGIONAL AVAILABILITY</b>	North America, Europe, Asia Pacific, South and Central America

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