PEBAX®
RNEW® 72R53 SP 01

Polyether block **Pebax® Rnew ® 72R53 SP 01 resin** is a thermoplastic elastomer made of flexible polyether and rigid polyamide based on renewable resources. This SP grade has been developed to be heat and UV resistant.

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
RHEOLOGICAL PROPERTIES			
Molding Shrinkage, parallel	1.5 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.3 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 560	MPa	ISO 527-1/-2
	- / 81200	psi	
Yield Stress	- / 28	MPa	ISO 527-1/-2
	- / 4060	psi	
Yield Strain	- / 28	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Stress at Break TPE	55 / *	MPa	ISO 527-1/-2
	7980 / *	psi	
Shore D Hardness, after 15 s	65 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 13	kJ/m²	ISO 179/1eA
	- / 6.18	ftlb/in²	
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	186 / *	°C	ISO 11357-1/-3
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	0.7 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.8 / *	%	ISO 62
Density	1030 / 1030	kg/m³	ISO 1183
	1.03 / 1.03	g/cm³	

MAIN APPLICATIONS:

- Ski shoes
- Athletic foot wear components

PACKAGING:

This grade is delivered dried in sealed packaging (20 kg bags) ready to be processed.

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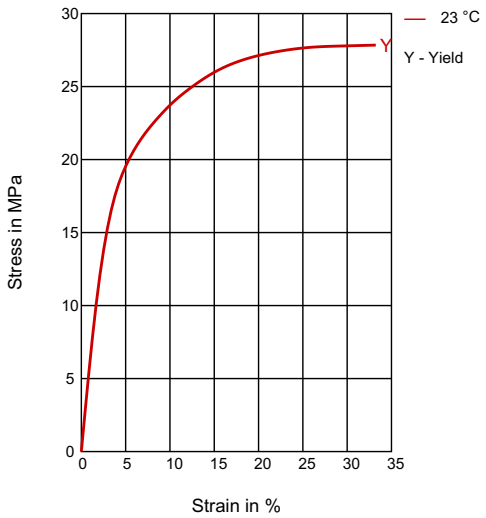
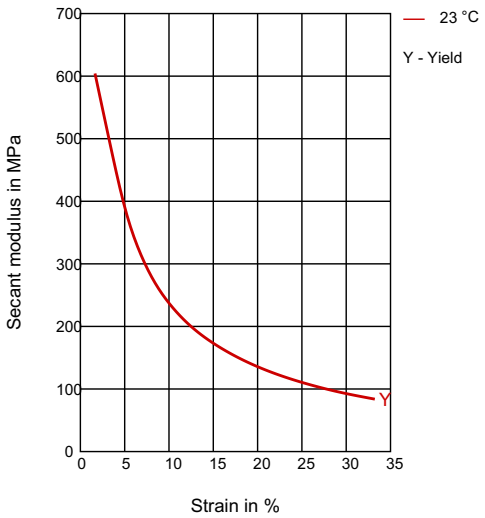
SHELF LIFE:
Two years from the delivery. For any use above this limit, please refer to our technical services.

DIAGRAMS

STRESS-STRAIN



SECANT MODULUS-STRAIN



Processing conditions (Injection) :
- Typical melt temperature (Min / Recommended / Max) : 230°C / 260°C / 290°C.
- Typical mold temperature : 25 – 60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 5-7 hours at 70-80°C.

Processing conditions (extrusion) :
- Typical melt temperature (Min / Recommended / Max): 230°C / 260°C / 290°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 5-7 hours at 70-80°C.

PROCESSING
Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

DELIVERY FORM
Pellets

SPECIAL CHARACTERISTICS
Bio-Based, Heat Stabilized, Light Stabilized

REGIONAL AVAILABILITY
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

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