

PEBAX[®] RNEW[®] 70R53 SP 01

Pebax® Rnew® 70R53 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	1.2 / *	%	ISO 294-4, 2577
Molding Shrinkage, normal	1.4 / *	%	ISO 294-4, 2577
MECHANICAL PROPERTIES			
Tensile Modulus	- / 360 - / 52200	MPa psi	ISO 527-1/-2
Yield Stress	- / 24 - / 3480	MPa psi	ISO 527-1/-2
Yield Strain	- / 42	%	ISO 527-1/-2
Nominal Strain at Break	- / >50	%	ISO 527-1/-2
Stress at 300% Elongation	57 / * 8270 / *	MPa psi	ISO 527-1/-2
Strain at Break TPE	>300 / *	%	ISO 527-1/-2
Shore D Hardness, after 15 s	62 / *	-	ISO 868
Charpy Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Impact Strength, -30°C	- / No Break	kJ/m ²	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	- / No Break	kJ/m ²	ISO 179/1eA
Charpy Notched Impact Strength, -30°C	- / 15 - / 7.14	kJ/m ² ftlb/in ²	ISO 179/1eA
THERMAL PROPERTIES			
Melting Temperature, 10°C/min	186 / *	°C	ISO 11357-1/-3
OTHER PROPERTIES			
Water Absorption, 23°C, immersion, equilibrium	1 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	0.7 / *	%	ISO 62
Density	1030 / 1030 1.03 / 1.03	kg/m ³ g/cm ³	ISO 1183

MAIN APPLICATIONS:

- Ski shoes
- Athletic foot wear components

PACKAGING:

This grade is delivered dried in sealed packaging (20 and 25 kg bags) ready to be processed.

Arkema France - A French "société anonyme", registered in the Nanterre (France) Trade and Companies Register under the number 319 632 790 SDC/11-2018
Source: automatically generated TDS from Material Database on 12-08-2024

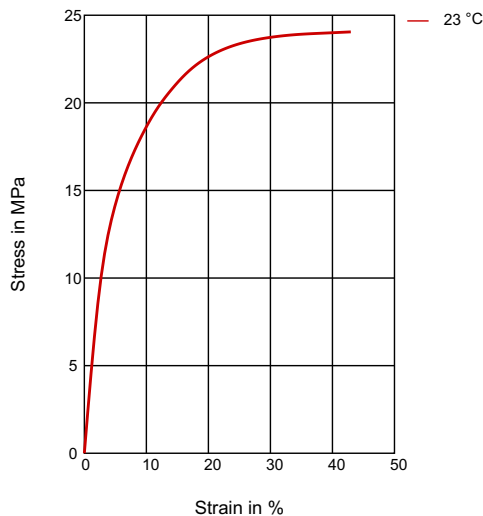
PEBAX[®] RNEW[®] 70R53 SP 01

SHELF LIFE:

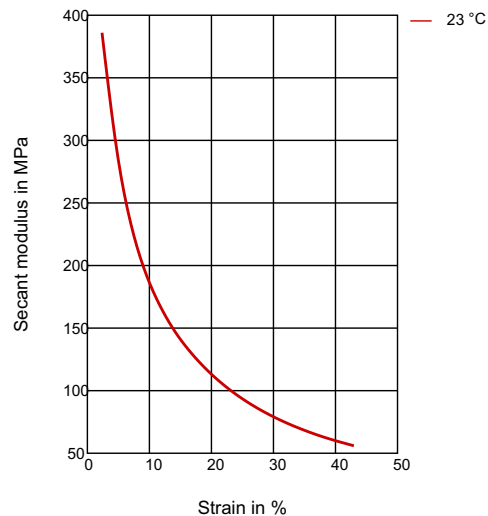
Two years from the delivery. For any use above this limit, please refer to our technical services.

DIAGRAMS

STRESS-STRAIN



SECANT MODULUS-STRAIN



Processing conditions:

- 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:

- Typical melt temperature (Min / Recommended / Max): 220°C / 235°C / 250°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 5-7 hours at 70-80°C.

PEBAX[®] RNEW[®] 70R53 SP 01

PROCESSING Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming	Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
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	

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.