

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 | 0.9 / * | % | ISO 294-4, 2577 |
| Molding Shrinkage, normal | 1.1 / * | % | 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/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 | - / 13 | kJ/m ² | ISO 179/1eA |
| | - / 6.18 | ftlb/in ² | |
| 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/m ³ | ISO 1183 |
| | 1.03 / 1.03 | g/cm ³ | |

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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Source: automatically generated TDS from Material Database on 12-08-2024

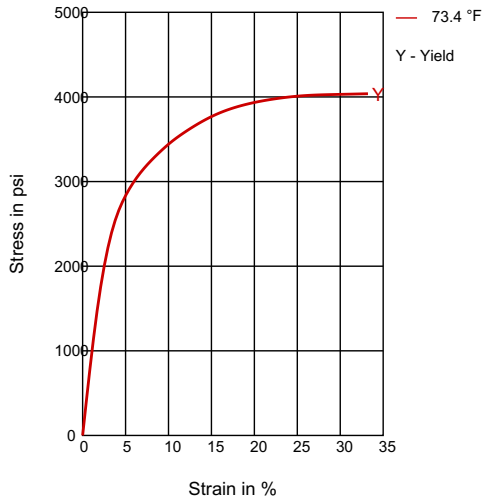
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SHELF LIFE:

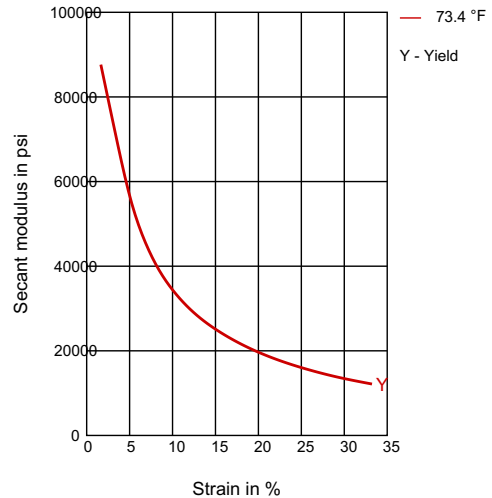
Two years from the delivery. For any use above this limit, please refer to our technical services.

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.

| | |
|--|---|
| <h3>PROCESSING</h3> <p>Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming</p> | <p>Headquarters: Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com</p> |
| <h3>DELIVERY FORM</h3> <p>Pellets</p> | |
| <h3>SPECIAL CHARACTERISTICS</h3> <p>Bio-Based, Heat Stabilized, Light Stabilized</p> | <p>Arkema Inc. – High Performance Polymers 900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com</p> |
| <h3>REGIONAL AVAILABILITY</h3> <p>North America, Europe, Asia Pacific, South and Central America, Near East/Africa</p> | |

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