

# Pebax® Rnew 35R53 SP 01

Polyether Block Amide

Arkema

## Message:

Polyether block amide Pebax® Rnew 35R53 SP 01 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.

| General Information                 |                            |                   |                 |
|-------------------------------------|----------------------------|-------------------|-----------------|
| Features                            | Good UV Resistance         |                   |                 |
|                                     | High Heat Resistance       |                   |                 |
|                                     | Renewable Resource Content |                   |                 |
| Forms                               | Pellets                    |                   |                 |
| Processing Method                   | Extrusion                  |                   |                 |
|                                     | Injection Molding          |                   |                 |
| Physical                            | Nominal Value              | Unit              | Test Method     |
| Density                             | 1.02                       | g/cm <sup>3</sup> | ISO 1183        |
| Molding Shrinkage <sup>1</sup>      |                            |                   | Internal Method |
| Across Flow : 24 hr, 4.00 mm        | 0.60                       | %                 |                 |
| Flow : 24 hr, 4.00 mm               | 0.60                       | %                 |                 |
| Water Absorption                    |                            |                   | ISO 62          |
| 23°C, 24 hr                         | 1.3                        | %                 |                 |
| Equilibrium, 23°C, 50% RH           | 0.50                       | %                 |                 |
| Hardness                            | Nominal Value              | Unit              | Test Method     |
| Shore Hardness <sup>2</sup>         |                            |                   | ISO 868         |
| Shore D                             | 32                         |                   |                 |
| Shore D, 15 sec                     | 25                         |                   |                 |
| Mechanical                          | Nominal Value              | Unit              | Test Method     |
| Tensile Stress <sup>3</sup> (Break) | 30.0                       | MPa               | ISO 527-2       |
| Tensile Strain <sup>4</sup> (Break) | > 700                      | %                 | ISO 527-2       |
| Flexural Modulus <sup>5</sup>       | 40.0                       | MPa               | ISO 178         |
| Impact                              | Nominal Value              | Unit              | Test Method     |
| Charpy Notched Impact Strength      |                            |                   | ISO 179         |
| -30°C                               | No Break                   |                   |                 |
| 23°C                                | No Break                   |                   |                 |
| Charpy Unnotched Impact Strength    |                            |                   | ISO 179         |
| -30°C                               | No Break                   |                   |                 |
| 23°C                                | No Break                   |                   |                 |
| Thermal                             | Nominal Value              | Unit              | Test Method     |

|                             |               |      |             |
|-----------------------------|---------------|------|-------------|
| Vicat Softening Temperature | 81.0          | °C   | ISO 306     |
| Melting Temperature         | 135           | °C   | ISO 11357-3 |
| Additional Information      | Nominal Value | Unit | Test Method |
| Renewable Carbon Content    | 28 to 32      | %    | ASTM D6866  |
| Injection                   | Nominal Value | Unit |             |
| Drying Temperature          | 55.0 to 65.0  | °C   |             |
| Drying Time                 | 4.0 to 8.0    | hr   |             |
| Processing (Melt) Temp      | 180 to 240    | °C   |             |
| Mold Temperature            | 10.0 to 30.0  | °C   |             |
| Extrusion                   | Nominal Value | Unit |             |
| Drying Temperature          | 55.0 to 65.0  | °C   |             |
| Drying Time                 | 4.0 to 8.0    | hr   |             |
| Melt Temperature            | 190 to 220    | °C   |             |

#### NOTE

1. Mold at 20°C
2. Samples conditioned 15 days at 23°C - 50 % R.H
3. Samples conditioned 15 days at 23°C - 50 % R.H
4. Samples conditioned 15 days at 23°C - 50 % R.H
5. Samples conditioned 15 days at 23°C - 50 % R.H

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT