

# RILSAMID® MA 4411 NAT

PA12, MHLR, 16-010

**Rilsamid® MA 4411 NAT resin** is a natural polyamide. This grade is plasticized and designed for tube extrusion.

**Rilsamid® MA 4411 NAT resin** falls into the PA12-HIPHL category according to DIN 73378 (PA12-HIP, EHL, 22-004).

This grade is also available in black.

| PROPERTIES                            | DRY /<br>COND   | UNIT      | TEST<br>STANDARD |
|---------------------------------------|-----------------|-----------|------------------|
| RHEOLOGICAL PROPERTIES                |                 |           |                  |
| Melt Volume-Flow Rate                 | 14 / *          | cm³/10min | ISO 1133         |
| Temperature                           | 235 / *         | °C        | -                |
|                                       | 455 / *         | °F        | -                |
| Load                                  | 5 / *           | kg        | -                |
|                                       | 11 / *          | lb        | -                |
| MECHANICAL PROPERTIES                 |                 |           |                  |
| Tensile Modulus                       | - / 470         | MPa       | ISO 527-1/-2     |
|                                       | - /             | psi       |                  |
| Yield stress                          | 68200<br>- / 25 | MPa       | ISO 527-1/-2     |
|                                       | - / 3630        | psi       |                  |
| Yield strain                          | - / 23          | %         | ISO 527-1/-2     |
| Nominal Strain at Break               | - / >50         | %         | ISO 527-1/-2     |
| Shore D Hardness                      | 63 / *          | -         | ISO 868          |
| Charpy Impact Strength, +23°C         | - / No<br>Break | kJ/m²     | ISO 179/1eU      |
| Charpy Impact Strength, -30°C         | - / No<br>Break | kJ/m²     | ISO 179/1eU      |
| Charpy Notched Impact Strength, +23°C | - / No<br>Break | kJ/m²     | ISO 179/1eA      |
| Charpy Notched Impact Strength, -30°C | - / 6           | kJ/m²     | ISO 179/1eA      |
|                                       | - / 2.85        | ftlb/in²  |                  |
| THERMAL PROPERTIES                    |                 |           |                  |
| Melting Temperature, 10°C/min         | 175 / *         | °C        | ISO 11357-1/-3   |
| OTHER PROPERTIES                      |                 |           |                  |
| Density                               | 1030 / -        | kg/m³     | ISO 1183         |
|                                       | 1.03 / -        | g/cm³     |                  |

# RILSAMID<sup>®</sup>

## MA 4411 NAT

|                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------|--|
| <b>PROCESSING</b><br>Profile Extrusion, Other Extrusion                                                          |  |
| <b>DELIVERY FORM</b><br>Pellets                                                                                  |  |
| <b>ADDITIVES</b><br>Plasticizer                                                                                  |  |
| <b>SPECIAL CHARACTERISTICS</b><br>Heat Stabilized, Light Stabilized                                              |  |
| <b>REGIONAL AVAILABILITY</b><br>North America, Europe, Asia Pacific, South and Central America, Near East/Africa |  |