

RILSAMID®

ASR 13

ISO 16396 - PA12, CF15, M1GHL, C16-080

Rilsamid® ASR 13 resin is a carbon fiber reinforced polyamide.
This black colored grade is designed for injection moulding.

| PROPERTIES | DRY / COND | UNIT | TEST STANDARD |
|--|-----------------|-------------------------|----------------|
| RHEOLOGICAL PROPERTIES | | | |
| Melt Volume-Flow Rate | 10 / * | cm ³ /10 min | ISO 1133 |
| Temperature | 235 / * | °C | - |
| | 455 / * | °F | - |
| Load | 5 / * | kg | - |
| | 11 / * | lb | - |
| Melt Flow Rate | ≥10 | g/10min | ASTM D1238 |
| MECHANICAL PROPERTIES | | | |
| Tensile Modulus | 9600 / 9000 | MPa | ISO 527-1/-2 |
| | 1.39E6 / 1.31E6 | psi | |
| Stress at Break | 127 / 115 | MPa | ISO 527-1/-2 |
| | 18400 / 16700 | psi | |
| Strain at Break | - / 4 | % | ISO 527-1/-2 |
| Charpy Impact Strength, +23°C | 45 / 46 | kJ/m ² | ISO 179/1eU |
| | 21.4 / 21.9 | ftlb/in ² | |
| Charpy Impact Strength, -30°C | 47 / 48 | kJ/m ² | ISO 179/1eU |
| | 22.4 / 22.8 | ftlb/in ² | |
| Charpy Notched Impact Strength, +23°C | 11 / 11 | kJ/m ² | ISO 179/1eA |
| | 5.23 / 5.23 | ftlb/in ² | |
| Charpy Notched Impact Strength, -30°C | 8 / 7 | kJ/m ² | ISO 179/1eA |
| | 3.81 / 3.33 | ftlb/in ² | |
| THERMAL PROPERTIES | | | |
| Melting Temperature, 10°C/min | 178 / * | °C | ISO 11357-1/-3 |
| Thermal Decomposition TGA, in air | 223 | °C | 1% wt. loss |
| | 434 | °F | |
| Thermal Decomposition TGA, in nitrogen | 223 | °C | 1% wt. loss |
| | 433 | °F | |
| ELECTRICAL PROPERTIES | | | |
| Surface Resistivity | * / 100000 | Ohm | IEC 62631-3-2 |
| OTHER PROPERTIES | | | |

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Source: automatically generated TDS from Material Database on 20-02-2024

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|--|----------|-------------------|----------|
| Water Absorption, 23°C, immersion, equilibrium | 1.5 / * | % | ISO 62 |
| Humidity Absorption, 23°C, RH50%, equilibrium | 0.6 / * | % | ISO 62 |
| Density | 1080 / - | kg/m ³ | ISO 1183 |
| | 1.08 / - | g/cm ³ | |

PACKAGING :&NBSP;

This grade is delivered dried in sealed packaging (25 kg bags / 450 kg rigid containers) ready to be processed

SHELF LIFE :&NBSP;

Two years from the delivery.

For any use above this limit please refer to our technical services.

Processing conditions:

- Typical melt temperature (Min / Recommended / Max) : 240°C / 260°C / 280°C.
- Typical mold temperature : 40 – 90°C.
- Drying time and temperature (only necessary for bags opened for more than two hours) : 4-8 hours at 80-90°C.

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

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