

Product Data Sheet & General Processing Conditions

RTP 152 HI HF Polypropylene (PP) Copolymer High Flow Flame Retardant

The RTP 152 family of compounds are flame retarded, unreinforced polypropylene materials. They offer excellent moldability, non-corrosive characteristics and the living-hinge effect.

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

| PERMANENCE | English | SI Metric | ASTM TEST |
|-----------------------------------|------------------------|------------------------|--------------|
| PERMANENCE | English | Si Wetric | IESI |
| Specific Gravity | 0.93 | 0.93 | D 792 |
| Melt Flow Rate | | | |
| @ 230 °C, / 2.16 kg | 18.00 - 22.00 g/10 min | 18.00 - 22.00 g/10 min | D 1238 |
| Molding Shrinkage | | | |
| 1/8 in (3.2 mm) section | 0.0150 - 0.0200 in/in | 1.50 - 2.00 % | D 955 |
| Water Absorption, 24 hrs @ 23°C | 0.010 % | 0.010 % | D 570 |
| MECHANICAL | | | |
| Impact Strength, Izod | | | |
| notched 1/8 in (3.2 mm) section | 12.0 ft-lbs/in | 641 J/m | D 256 |
| unnotched 1/8 in (3.2 mm) section | No Break | No Break | D 4812 |
| Tensile Strength | 2000 psi | 14 MPa | D 638 |
| Tensile Elongation | | | |
| Break | > 100.0 % | > 100.0 % | D 638 |
| Tensile Modulus | 0.12 x 10^6 psi | 827 MPa | D 638 |
| Flexural Strength | 2600 psi | 18 MPa | D 790 |
| Flexural Modulus | 0.09 x 10^6 psi | 621 MPa | D 790 |
| ELECTRICAL | | | |
| Volume Resistivity | > 1E15 ohm.cm | > 1E15 ohm.cm | D 257 |
| THERMAL | | | |
| Deflection Temperature | | | |
| @ 264 psi (1820 kPa) | 105 °F | 41 °C | D 648 |
| Ignition Resistance* | | | |
| Flammability** | V-2 @ 1/32 in | V-2 @ 0.8 mm | D 3801 |
| PROPERTY NOTES | | | |

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

GENERAL PROCESSING FOR INJECTION MOLDING

| | English | SI Metric |
|--------------------|-------------------|--------------|
| | | |
| Injection Pressure | 10000 - 15000 psi | 69 - 103 MPa |
| Melt Temperature | 375 - 450 °F | 191 - 232 °C |
| Mold Temperature | 90 - 150 °F | 32 - 66 °C |

^{*} This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

^{**} Values per RTP Company testing.

Drying 2 hrs @ 175 °F 2 hrs @ 79 °C

PROCESSING NOTES

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein.

Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

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