

Technical Data Sheet

Polyflam RIPP 4000 OSD SF GRY64540



Polypropylene Copolymer

Product Description

Flame-retardant PP-Copolymer, halogenfree, optimized smoke density

Regulatory Status

For regulatory compliance information, see *Polyflam* RIPP 4000 OSD SF GRY64540 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

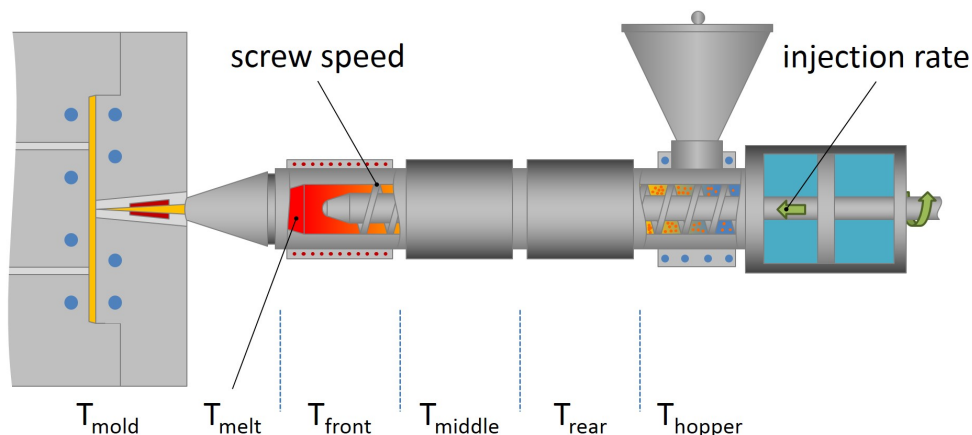
Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Europe; Latin America; North America
Processing Method	Injection Molding
Attribute	Copolymer; Good Processability; Halogen Free
Additive	Flame Retardant

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (230 °C/2.16 kg)	9.0	cm ³ /10 min	ISO 1133
Density, (Method A)	1.08	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	17.0	MPa	ISO 527-2
Nominal Tensile Strain at Break, (50 mm/min, Type 1A)	18	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	2100	MPa	ISO 178
Tensile Strain at Yield, (Type 1A, 50 mm/min)	2.5	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 50 mm/min)	13.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	1900	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 3.5%)	28.0	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	2.3	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	1.6	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	70	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	14	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	78.0	°C	ISO 306
(A (10N), 50 °C/h)	147	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa)	108	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	59.0	°C	ISO 75-2/A
Electrical			
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammable			

Burning Rate			
(2.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(2.00 mm, Self-Extinguishing)	0.0	mm/min	FMVSS 302
Glow Wire Flammability Index			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(0.75 mm)	725	°C	IEC 60695-2-13
(1.5 mm)	725	°C	IEC 60695-2-13
(3.0 mm)	725	°C	IEC 60695-2-13

UL Information

Flammability Classification			
(0.75 mm)	V-0		IEC 60695-11-10, -20
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20



Injection Parameters		Nominal Value	Units
Drying Time		2.0 to 4.0	hr
Drying Temperature		70 to 80	°C
Nozzle Temperature		220	°C
Screw Speed		<300	mm/sec
Processing (Melt) Temp		180 to 220	°C
Front Temperature		210	°C
Holding Pressure		40.0 to 90.0	MPa
Middle Temperature		200	°C
Rear Temperature		180	°C
Injection Rate		Slow-Moderate	
Back Pressure		5.00 to 10.0	MPa
Mold Temperature		40 to 80	°C
Injection Pressure		80.0 to 120	MPa
Cushion		<5.00	mm

Notes

These are typical property values not to be construed as specification limits.

Processing notes

Melt contacting surfaces should be made of a high quality, corrosive resistant steel. Positive experiences have been made with steel qualities containing > 12% chromium.

Avoid processing at very barrel high temperatures or above the recommended melt temperature range as this can increase risk of deposit onto the tool surfaces. Avoid long residence times. At start and end of production, it is recommended to purge clean with non-flame retardant polymer or a polyolefin.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2018

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.