

Technical Data Sheet

Polyflam RMMB 40400 NAT



Polycarbonate + ABS

Product Description

Flame retardant ABS/PC blend for higher temperature resistance and impact strength; halogen free according to DIN VDE 0472 part 815

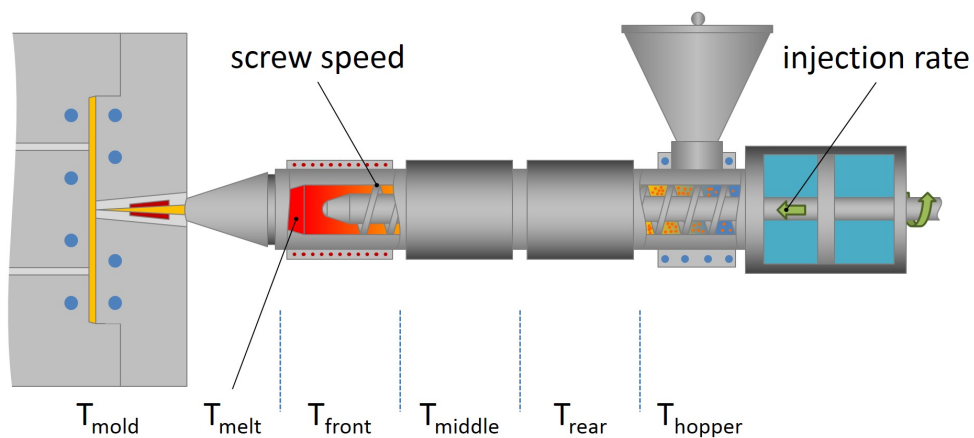
Regulatory Status

For regulatory compliance information, see *Polyflam RMMB 40400 NAT* [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	Good Impact Resistance; Good Processability; Halogen Free; Low Temperature Impact Resistance
Additive	Flame Retardant

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Volume Flow Rate, (260 °C/5.0 kg)	28	cm ³ /10 min	ISO 1133
Density, (Method A)	1.18	g/cm ³	ISO 1183
Mechanical			
Tensile Stress at Yield, (Type 1A, 50 mm/min)	63.0	MPa	ISO 527-2
Tensile Strain at Yield, (Type 1A, 50 mm/min)	5.0	%	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	2400	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	63	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	21	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
Hardness			
Ball Pressure Test, (105 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	110	°C	ISO 306
(A (10N), 50 °C/h)	115	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	103	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	95.0	°C	ISO 75-2/A
RTI Elec			
(1.5 mm)	60.0	°C	UL 746B
(3.0 mm)	60.0	°C	UL 746B

RTI Imp			
(1.5 mm)	60.0	°C	UL 746B
(3.0 mm)	60.0	°C	UL 746B
RTI Str			
(1.5 mm)	60.0	°C	UL 746B
(3.0 mm)	60.0	°C	UL 746B
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	225	V	IEC 60112
High Amp Arc Ignition			UL 746A
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Hot-wire Ignition (HWI)			UL 746A
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			
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
(3.5 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	800	°C	IEC 60695-2-13
(3.0 mm)	800	°C	IEC 60695-2-13
(3.5 mm)	800	°C	IEC 60695-2-13
Oxygen Index	33	%	ISO 4589-2
UL Information			
Flame Rating			
(1.5 mm)	V-0		UL 94
(3.0 mm)	V-0		UL 94
(3.5 mm)	V-0		UL 94
(3.5 mm)	5VA		UL 94
Flammability Classification			
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		IEC 60695-11-10, -20
(3.5 mm)	5VA		IEC 60695-11-10, -20
(3.5 mm)	V-0		IEC 60695-11-10, -20
UL File Number	E86615		



Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80 to 100	°C
Suggested Max Moisture	0.02	%
Screw Speed	<300	mm/sec
Processing (Melt) Temp	260 to 270	°C
Injection Rate	Slow-Moderate	
Back Pressure	5.00 to 10.0	MPa
Mold Temperature	60 to 80	°C

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.