

Technical Data Sheet

Polyfort TPP40AC38WH-WHWHI



Polypropylene, Homopolymer

Product Description

Meets/Exceeds Ford Engineering Specification WSK-M4D644-A4. Primary end use is for instrument clusters.

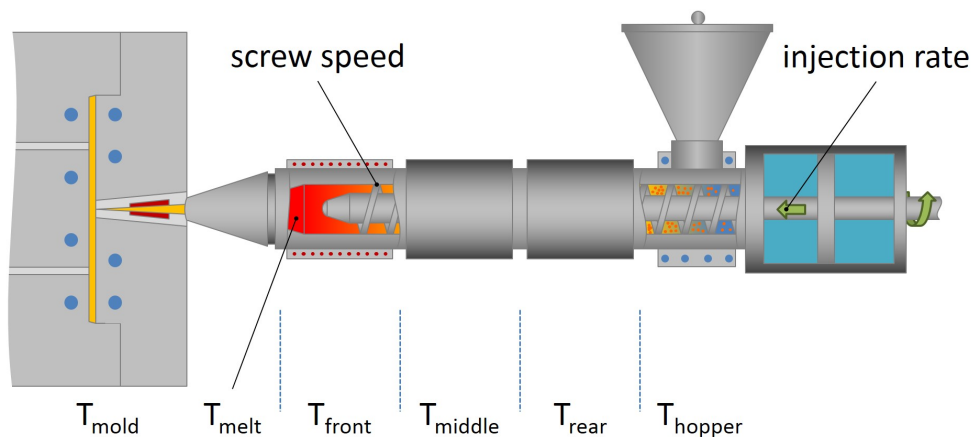
Regulatory Status

For regulatory compliance information, see TPP40AC38WH-WHWHI [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	Latin America; North America
Processing Method	Injection Molding
Attribute	Heat Stabilized; Homopolymer
Forms	Pellets
Appearance	White
Additive	Heat Stabilizer
Filler/Reinforcement	Talc, 43%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(230 °C/2.16 kg)	5.7	g/10 min	ASTM D1238
(230 °C/2.16 kg)	5.2	g/10 min	ISO 1133
Density	1.3	g/cm ³	ISO 1183
Density - Specific Gravity	1.32	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	29	MPa	ASTM D638
Flexural Strength at Yield	48.3	MPa	ASTM D790
Tensile Stress at Yield, (23 °C)	27.6	MPa	ISO 527-2
Flexural Modulus	3800	MPa	ISO 178
Tensile Elongation at Break	11	%	ASTM D638
Impact			
Notched Izod Impact Strength			
(23 °C)	2.0	kJ/m ²	ISO 180
(-40 °C)	1.7	kJ/m ²	ISO 180
Gardner Impact	1.02	J	ASTM D3029
Unnotched Izod Impact, (23 °C)	270	J/m	ASTM D4812
Notched Izod Impact, (23 °C)	27	J/m	ASTM D256
Hardness			
Durometer Hardness, (Shore D)	74		ASTM D2240
Thermal			

Deflection Temperature Under Load Unannealed (0.45 MPa)	130 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	82 °C	ISO 75-2/A
Deflection Temperature Under Load Unannealed (264 psi)	82.2 °C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	129 °C	ASTM D648



Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 3.0	hr
Drying Temperature	80	°C
Clamp Tonnage	2.8 to 4.1	kN/cm ²
Nozzle Temperature	216 to 218	°C
Screw Speed	100 to 150	rpm
Processing (Melt) Temp	220 to 260	°C
Front Temperature	213 to 216	°C
Screw L/D Ratio	20.0-1.0	
Screw Compression Ratio	2.0-1.0	
Middle Temperature	210 to 213	°C
Rear Temperature	204 to 210	°C
Back Pressure	0.138 to 0.345	MPa
Mold Temperature	30 to 60	°C

Notes

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

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/>.

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