Technical Data Sheet

LyondellBasell

Schulamid 612 IC 4005 W

Polyamide 612
LyondellBasell Industries
Engineering Plastics

Product Description			
Unfilled and plasticized polyamide 612 compound.			
General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Processing Method	• Extrusion		
Resin ID (ISO 1043)	• PA612		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.04	--	g/cm³	ISO 1183
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	69600 (480)	39900 (275)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress				ISO 527-2/1A/50
Yield	3050 (21.0)	3190 (22.0)	psi (MPa)	
Break	5950 (41.0)	4790 (33.0)	psi (MPa)	
Tensile Strain (Yield)	12	46	%	ISO 527-2/1A/50
Nominal Tensile Strain at Break	240	240	%	ISO 527-2/1A/50
Flexural Modulus [1]	70300 (485)	--	psi (MPa)	ISO 178
Flexural Stress [1]				ISO 178
10% Strain	2610 (18.0)	--	psi (MPa)	
3.5% Strain	1890 (13.0)	--	psi (MPa)	
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-40°F (-40°C)	12 (25)	--	ft·lb/in² (kJ/m²)	
-22°F (-30°C)	14 (30)	--	ft·lb/in² (kJ/m²)	
73°F (23°C)	57 ft·lb/in² (120 kJ/m²)	No Break	(kJ/m²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F (-40°C)	No Break	--		
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 psi (0.45 MPa), Unannealed	203 (95.0)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	104 (40.0)	--	°F (°C)	ISO 75-2/Af
Vicat Softening Temperature				
--	248 (120)	--	°F (°C)	ISO 306/B50
--	372 (189)	--	°F (°C)	ISO 306/A50
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate				
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	ISO 3795
0.0787 in (2.00 mm)	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302

Additional Information
ISO 1874-PA 612-P-EAGHLW-14-005-X
DIN73378-PA 612-HIPHL

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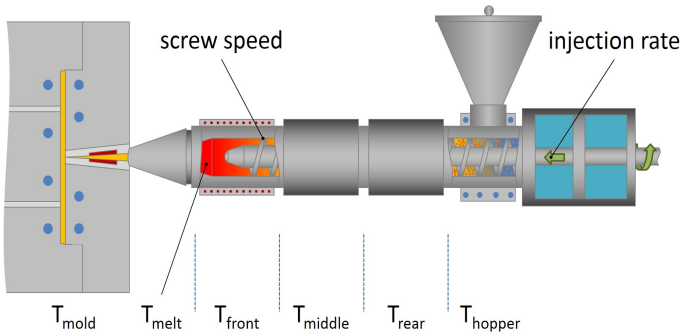

Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	446 to 518 °F	230 to 270 °C
Mold Temperature	122 to 194 °F	50 to 90 °C

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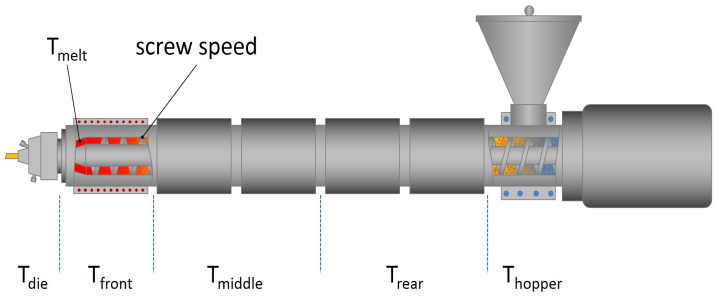

Extrusion	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	< 0.10 %	< 0.10 %
Melt Temperature	446 to 518 °F	230 to 270 °C

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Notes

[1] 0.079 in/min (2.0 mm/min)

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.

Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

Company Information

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

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