

Technical Data Sheet



CirculenRecover EP PA6 GF30 HI H BLACK

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description

30% glass fiber reinforced, heat stabilized and impact modified Polyamide 6 formulated on mechanical recycled sourcing. Standard color is black, color matching for dark colors possible. Automotive structural applications are possible.

Sustainability:

According with the requirements of Standard ISO 14021:2016, Circulen Recover EP PA6 GF30 HI H BLACK contains 30% of recycled material that is fully based on pre-consumer waste.

Recycled content according to DIN SPEC 91446:2021-12: R30

Data Quality Level according to DIN SPEC 91446:2021-12: DQL4

Data Quality Level according to VDA 284: DQL Automotive

General

Material Status	• Commercial: Active
Availability	• Europe
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Recycled Content	• Post-Industrial (PIR)/Pre-Consumer, 30%
Features	• Heat Stabilized • Impact Modified • Medium Viscosity
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-I GF30

Physical	Dry	Conditioned	Unit	Test Method
Density	1.30	--	g/cm ³	ISO 1183/A
Apparent (Bulk) Density	0.60 to 0.80	--	g/cm ³	ISO 60
Water Absorption (Saturation, 73°F (23°C))	--	1.6	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.09E+6 (7500)	653000 (4500)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress				
Yield	15200 (105)	10900 (75.0)	psi (MPa)	ISO 527-2
Break	15200 (105)	8700 (60.0)	psi (MPa)	ISO 527-2/1A/5
Tensile Strain				
Yield	3.0	6.0	%	ISO 527-2
Break	3.0	9.5	%	ISO 527-2/1A/5
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	5.7 (12)	--	ft-lb/in ² (kJ/m ²)	
73°F (23°C)	9.5 (20)	14 (30)	ft-lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	29 (60)	--	ft-lb/in ² (kJ/m ²)	
73°F (23°C)	31 (65)	38 (80)	ft-lb/in ² (kJ/m ²)	

Technical Data Sheet**CirculenRecover EP PA6 GF30 HI H BLACK**

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
66 psi (0.45 MPa), Unannealed	428 (220)	--	°F (°C)	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	392 (200)	--	°F (°C)	ISO 75-2/Af
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate	< 3.9 (< 100)	--	in/min (mm/min)	FMVSS 302
Flame Rating	HB	--		UL 94

Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications

A Certificate of Analysis (CoA) is provided with every lot. DSC data is available on request. Content of not intentionally added other plastics is below 1%.

Technical Data Sheet



CirculenRecover EP PA6 GF30 HI H BLACK

Polyamide 6
LyondellBasell Industries
Engineering Plastics



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	482 to 536 °F	250 to 280 °C
Mold Temperature	140 to 212 °F	60 to 100 °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.

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/>.

© LyondellBasell Industries Holdings, B.V. 2024

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.