Technical Data Sheet

*Circulen*Recover EP PA66 SHI H BLK968001

Polyamide 66

Product Description

High impact modified, heat stabilized Polyamide 66 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 PA66 MV SHI H BLACK contains 80% of recycled material that is fully based on pre-consumer waste.Recycled content according to DIN SPEC 91446:2021-12: R80Data Quality Level according to DIN SPEC 91446:2021-12: DQL4Data Quality Level according to VDA 284: DQL Automotive

Processing Method	Injection Molding
Attribute	Heat Stabilized; Impact Modified; Medium Viscosity
Resin ID	PA66-I

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.09	g/cm³	ISO 1183
Apparent (Bulk) Density	0.60 to 0.80	g/cm³	ISO 60
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	55.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	38.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	5.0	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	30	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	2000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	850	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	55	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	12	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	No Break		ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	165	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	58.0	°C	ISO 75-2/A
Flammable			
Burning Rate, (FMVSS 302)	<100	mm/min	FMVSS 302
Additional Information			
Water Absorption Sat/23C, - Conditioned	2.2	%	ISO 62
UL Information			
Flame Rating	HB		UL 94

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	270 to 290	°C
Mold Temperature	60 to 100	°C