

# Borealis PP MG302AI

Polypropylene

Borealis AG

## Message:

MG302AI is a 30% mineral filled polypropylene compound intended for injection and back injection moulding. This material has an excellent balance between impact strength and stiffness and high melt flow rate.

General Information			
Filler / Reinforcement			Mineral filler, 30% filler by weight
Features			Good dimensional stability Rigid, good Impact resistance, good High liquidity
Uses	Application in Automobile Field Car interior parts		
Forms	Particle		
Processing Method	Multiple injection molding Injection molding		
Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	24	g/10 min	ISO 1133
Molding Shrinkage	0.90	%	Internal method
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness (H 358/30)	91.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (Injection Molded)	3400	MPa	ISO 527-2/1
Tensile Stress (Yield, Injection Molded)	31.0	MPa	ISO 527-2/50
Tensile Strain (Yield, Injection Molded)	3.0	%	ISO 527-2/50
Flexural Modulus <sup>1</sup> (Injection Molded)	3400	MPa	ISO 178
Flexural Stress (Injection Molded)	48.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-20°C, injection molding	1.2	kJ/m <sup>2</sup>	ISO 179/1eA
23°C, injection molding	2.0	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-20°C, injection molding	13	kJ/m <sup>2</sup>	ISO 179/1eU
23°C, injection molding	22	kJ/m <sup>2</sup>	ISO 179/1eU

Notched Izod Impact			ISO 180/1A
-20°C, injection molding	1.2	kJ/m <sup>2</sup>	ISO 180/1A
23°C, injection molding	2.0	kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength			
-20°C, injection molding	12	kJ/m <sup>2</sup>	ISO 180
23°C, injection molding	20	kJ/m <sup>2</sup>	ISO 180/1U
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, not annealed	125	°C	ISO 75-2/B
1.8 MPa, not annealed	70.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	155	°C	ISO 306/A50
--	95.0	°C	ISO 306/B50
Melt Energy	73.0	kJ/kg	ISO 11357
Atomization-16 hrs (100°C)		mg	DIN 75201
Emission		µgC/g	VDA 277
Injection	Nominal Value	Unit	
Drying Temperature	80.0	°C	
Drying Time	3.0	hr	
Hopper Temperature	40.0 - 80.0	°C	
Processing (Melt) Temp	220 - 260	°C	
Mold Temperature	30.0 - 50.0	°C	
Holding Pressure	30.0 - 60.0	MPa	
Injection instructions			
Back pressure: Low to mediumScrew speed: Low to mediumFlow front speed: 100 - 200 mm/s			
NOTE			
1.	2.0 mm/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

