Pinnacle PP 4211

Polypropylene Impact Copolymer

Pinnacle Polymers

Message:

11 MELT FLOW HIGH IMPACT COPOLYMER FOR INJECTION MOLDING
Pinnacle Polymers Polypropylene 4211 is made via UNIPOL™ PP technology, which utilizes gas-phase fluidized bed reactors with a high activity catalyst system to ensure uniform physical properties and lot-to-lot consistency.
This product is intended for injection molding of automotive, appliance, lawn and garden products, consumer and industrial applications. Provides an excellent base stock for compounding of filled and reinforced grades.
The 4211 product provides:
Wet/Dry environment resistance
Superior balance of stiffness and impact strength
Excellent color and processing stability
Enhanced weld-line strength
It is characterized by its easy mold flow and high impact at both room and sub ambient conditions.
Pinnacle's 4211 polypropylene is covered under US FDA Food Contact Notification 864. As such, this polymer can be used in contact with all food types under Conditions of Use A-H, as described in 21 CFR 176.170, Tables 1 and 2. This polymer also complies with 21 CFR 177.1520(c), items 3.1(a) and 3.2(a).

General Information	
Features	Food Contact Acceptable
	Good Color Stability
	Good Flow
	Good Processing Stability
	High Impact Resistance
	Impact Copolymer
	Low Temperature Impact Resistance
	Weldable
Uses	Appliances
	Automotive Applications
	Compounding
	Consumer Applications
	Industrial Applications
	Lawn and Garden Equipment
Agency Ratings	FDA 21 CFR 176.170 Table 1 & 2, Cond A-H
	FDA 21 CFR 177.1520(c) 3.1a
	FDA 21 CFR 177.1520(c) 3.2a
Forms	Pellets
Processing Method	Compounding
	Injection Molding

Physical	Nominal Value	Unit	Test Method

Density	0.900	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	11	g/10 min	ASTM D1238
Molding Shrinkage - Flow	1.3	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [1] (Yield, 3.20 mm, Injection Molded)	23.5	MPa	ASTM D638
Tensile Elongation [2] (Yield, 3.20 mm, Injection Molded)	7.0	%	ASTM D638
Flexural Modulus - 1% Secant [3] (3.20 mm, Injection Molded)	1040	MPa	ASTM D790A
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact [4] (23°C, 3.20 mm, Injection Molded)	> 530	J/m	ASTM D256
Notched Izod Impact (Area) [5] (23°C, 3.20 mm, Injection Molded)	> 52.0	kJ/m²	ASTM D256
Gardner Impact [6] (-30°C)	35.2	J	ASTM D5420
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (0.45 MPa, Unannealed)	85.0	°C	ASTM D648

NOTE	
1.	Type I, 51 mm/min
2.	Type I, 51 mm/min
3.	Type I, 1.3 mm/min
4.	Type I
5.	Type I
6.	Method G, Geometry GC

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