Diamond ASA S210 1003 UVNAT

LyondellBasell Industries - Acrylonitrile Styrene Acrylate

General Information

Product Description

Diamond ASA S210 1003 UVNAT is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and Ultra High Impact Resistance.

General

Features	• Good Weather Resistance	• Ultra High Impact Resistance
Forms	• Pellets	
Processing Method	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) [2]			ASTM D1238
200°C/5.0 kg	0.90	g/10 min	
230°C/3.8 kg	2.7	g/10 min	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [3] (Yield)	5110	psi	ASTM D638
Flexural Modulus - Tangent [4]	273000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (73°F, 0.125 in)	8.4	ft·lb/in	ASTM D256
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	88		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.125 in	162	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Annealed, 0.125 in	196	°F	
Vicat Softening Temperature	212	°F	ASTM D1525 [5]

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 to 185	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Suggested Shot Size	40 to 70	%
Rear Temperature	446 to 500	°F
Middle Temperature	450 to 509	°F
Front Temperature	455 to 522	°F
Nozzle Temperature	428 to 522	°F
Processing (Melt) Temp	428 to 522	°F
Mold Temperature	104 to 176	°F
Injection Rate	Fast	
Back Pressure	75.0 to 149	psi