

Diamond ASA TW18B2 5971GRY

LyondellBasell Industries - Acrylonitrile Styrene Acrylate

General Information

Product Description

Diamond ASA TW18B2 5971GRY is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and High Heat Resistance.

General

Features	<ul style="list-style-type: none"> • Good Weather Resistance • High Heat Resistance
Forms	<ul style="list-style-type: none"> • Pellets
Processing Method	<ul style="list-style-type: none"> • Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.12		ASTM D792
Melt Mass-Flow Rate (MFR) ²			ASTM D1238
200°C/5.0 kg	0.30	g/10 min	
220°C/10.0 kg	4.1	g/10 min	
230°C/3.8 kg	1.3	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield)	7080	psi	ASTM D638
Flexural Modulus - Tangent ⁴	352000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	1.6	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	102		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.125 in	205	°F	
264 psi, Unannealed, 0.250 in	230	°F	
Vicat Softening Temperature	264	°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