

Diamond ASA S246 1818 UV BLACK

LyondellBasell Industries - Acrylonitrile Styrene Acrylate

General Information

Product Description

Diamond ASA S246 1818 UV BLACK is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Flexibility, and Good Weather Resistance.

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) ² (220°C/10.0 kg)	20	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus - Tangent ³ (73°F, Injection Molded)	373000	psi	ASTM D638
Tensile Strength ³ (Yield, 73°F, Injection Molded)	6660	psi	ASTM D638
Tensile Elongation ³ (Yield, 73°F, Injection Molded)	2.9	%	ASTM D638
Flexural Modulus - Tangent ⁴ (0.125 in, 2.00 in Span)	363000	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	2.2	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed, 0.125 in, Injection Molded	174	°F	ASTM D648

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176 to 185	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	40 to 70	%
Rear Temperature	446 to 480	°F
Middle Temperature	450 to 500	°F
Front Temperature	455 to 500	°F
Nozzle Temperature	428 to 500	°F
Processing (Melt) Temp	428 to 500	°F
Mold Temperature	151 to 180	°F
Injection Rate	Fast	
Back Pressure	75.0 to 149	psi

Notes

¹ Typical properties: these are not to be construed as specifications.

² Procedure A

³ Type I, 2.0 in/min

⁴ Method I (3 point load), 0.051 in/min