

Technical Data Sheet

**Diamond ASA S510 40019 UVBEI**



Acrylonitrile Styrene Acrylate

**Product Description**

Diamond ASA S510 40019 UVBEI is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and Medium Impact Resistance.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Weather Resistance; Medium Impact Resistance
<b>Forms</b>	Pellets

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (230 °C/3.8 kg, Procedure A)	6.5	g/10 min	ASTM D1238
Density - Specific Gravity	1.06	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>			
Tensile Strength at Yield, (51 mm/min)	44.1	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2280	MPa	ASTM D790
<b>Impact</b>			
Notched Izod Impact, (23 °C, 3.18 mm)	130	J/m	ASTM D256
<b>Thermal</b>			
Vicat Softening Temperature, (Loading 1 (10 N))	92.2	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	82.8	°C	ASTM D648
<b>UL Information</b>			
Flame Rating, (1.5 mm)	HB		UL 94
UL File Number	E150937		

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	80 to 85	°C
Suggested Max Moisture	0.1	%
Nozzle Temperature	220 to 272	°C
Processing (Melt) Temp	220 to 272	°C
Front Temperature	235 to 272	°C
Suggested Shot Size	40 to 70	%
Middle Temperature	232 to 265	°C
Rear Temperature	230 to 260	°C
Injection Rate	Fast	
Back Pressure	0.517 to 1.03	MPa
Mold Temperature	40 to 80	°C