# Diamond ASA S510

## Acrylonitrile Styrene Acrylate

Network Polymers, Inc.

#### Message:

Diamond ASA S510 is an Acrylonitrile Styrene Acrylate (ASA) product. It can be processed by injection molding and is available in North America. Characteristics include:

Flame Rated

REACH Compliant

**RoHS Compliant** 

WEEE Compliant

Good Weather Resistance

Features Good Weather Resistance Medium Impact Resistance  Medium Impact Resistance  EC 1907/2006 (REACH) EU 2002/96/EC (WEEE)  ROHS Compliance ROHS Compliant UL File Number E150937  Forms Pellets  Processing Method Injection Molding  Physical Nominal Value Unit Test Method Specific Gravity 1.06 g/cm³ ASTM D792  Melt Mass-Flow Rate (MFR) 1 (230°C/3.8 kg) 6.5 g/10 min ASTM D1238  Mechanical Nominal Value Unit Test Method Tensile Strength 2 (Yield) 44.1 MPa ASTM D638 Flexural Modulus - Tangent 3 2280 MPa ASTM D790	
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Impact Nominal Value Unit Test Method	
Notched Izod Impact (23°C, 3.18 mm) 130 J/m ASTM D256	
Thermal Nominal Value Unit Test Method	
Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm) 82.8 °C ASTM D648	
Vicat Softening Temperature 92.2 °C ASTM D1525 <sup>4</sup>	
Flammability Nominal Value Test Method	
Flame Rating (1.50 mm) HB UL 94	
Injection Nominal Value Unit	
Drying Temperature 80.0 to 85.0 °C	
Drying Time 2.0 to 4.0 hr	
Suggested Max Moisture 0.10 %	
Suggested Shot Size 40 to 70 %	

Suggested Max Regrind	30	%
Rear Temperature	230 to 260	°C
Middle Temperature	232 to 265	°C
Front Temperature	235 to 272	°C
Nozzle Temperature	220 to 272	°C
Processing (Melt) Temp	220 to 272	°C
Mold Temperature	40.0 to 80.0	°C
Injection Rate	Fast	
Injection Rate  Back Pressure	0.517 to 1.03	MPa
·		MPa
Back Pressure		MPa
Back Pressure  NOTE	0.517 to 1.03	MPa
NOTE  1.	0.517 to 1.03  Procedure A	MPa

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