

Technical Data Sheet

Diamond Asa TWP-155

Acrylonitrile Styrene Acrylate
 LyondellBasell Industries
 Engineering Plastics

General		
Features	<ul style="list-style-type: none"> • Good Weather Resistance • UV Resistant 	
Agency Ratings	<ul style="list-style-type: none"> • EC 1907/2006 (REACH) • EU 2002/96/EC (WEEE) 	
RoHS Compliance	<ul style="list-style-type: none"> • RoHS Compliant 	
Appearance	<ul style="list-style-type: none"> • Clear/Transparent 	
Forms	<ul style="list-style-type: none"> • Pellets 	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.16	1.16 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹			ASTM D1238
200°c/5.0 Kg	2.1 g/10 min	2.1 g/10 min	
230°c/3.8 Kg	14 g/10 min	14 g/10 min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	8450 psi	58.3 MPa	ASTM D638
Flexural Modulus ³	339000 psi	2340 MPa	ASTM D790B

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 In (3.18 Mm))	0.60 ft·lb/in	32 J/m	ASTM D256A

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	119	119	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	149 °F	65.0 °C	

Vicat Softening Temperature	203 °F	95.0 °C	ASTM D1525 ⁴
-----------------------------	--------	---------	-------------------------

Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Light Transmittance (118.1 Mil (3000 µm))	85.5 %	85.5 %	ASTM D1003
Haze (118.1 Mil (3000 µm))	7.60 %	7.60 %	ASTM D1003

- Notes**
- ¹ Procedure A
 - ² 2.0 in/min (51 mm/min)
 - ³ Method I (3 point load), 0.050 in/min (1.3 mm/min)
 - ⁴ Loading 1 (10 N)

Notes
 These are typical property values not to be construed as specification limits.