

# Diamond ASA TWP502 7378WHI

LyondellBasell Industries - Acrylonitrile Styrene Acrylate

## General Information

### Product Description

Diamond ASA TWP502 7378WHI is a Acrylonitrile Styrene Acrylate material. Features include: Good Weather Resistance.

### General

Features	• Good Weather Resistance
Forms	• Pellets

## Properties<sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.12		ASTM D792
Melt Mass-Flow Rate (MFR) <sup>2</sup>			ASTM D1238
200°C/5.0 kg	1.3	g/10 min	
230°C/3.8 kg	3.9	g/10 min	
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>3</sup> (Yield)	5050	psi	ASTM D638
Flexural Modulus <sup>4</sup>	194000	psi	ASTM D790B
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (0.125 in)	2.1	ft-lb/in	ASTM D256A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	98		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed, 0.125 in	181	°F	ASTM D648
Deflection Temperature Under Load 66 psi, Annealed, 0.125 in	201	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Unannealed, 0.125 in	156	°F	ASTM D648
Deflection Temperature Under Load 264 psi, Annealed, 0.125 in	187	°F	ASTM D648
Vicat Softening Temperature	201	°F	ASTM D1525 <sup>5</sup>
Optical	Nominal Value	Unit	Test Method
Light Transmittance (118.1 mil)	88.0	%	ASTM D1003
Haze (118.1 mil)	8.00	%	ASTM D1003

## 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

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<b>Injection</b>	<b>Nominal Value</b>	<b>Unit</b>
Processing (Melt) Temp	428 to 522	°F
Mold Temperature	104 to 176	°F
Injection Rate	Fast	
Back Pressure	75.0 to 149	psi

**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Procedure A

<sup>3</sup> 2.0 in/min

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

<sup>5</sup> Loading 1 (10 N)