

Technical Data Sheet

Diamond ASA S150UV.4A565 MED STONE



Acrylonitrile Styrene Acrylate

Product Description

Diamond ASA S150UV.4A565 MED STONE is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and High Impact Resistance.

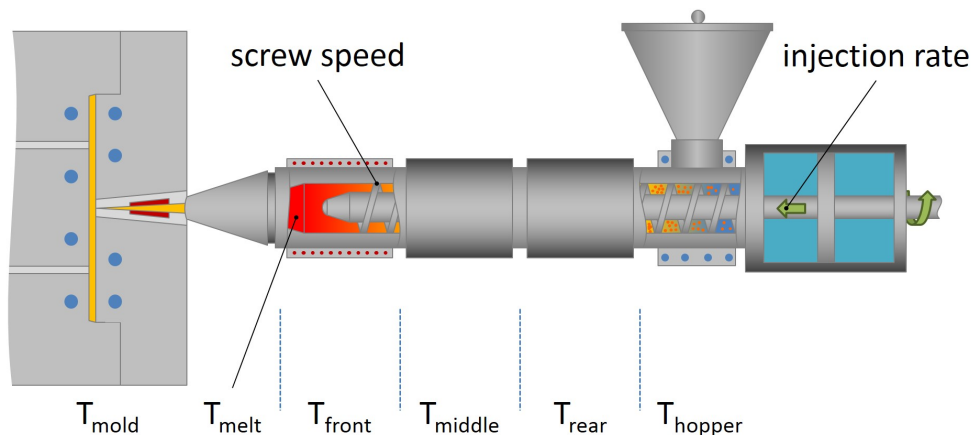
Regulatory Status

For regulatory compliance information, see ASA S150UV.4A565 MED STONE [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Commercial: Active
Availability	North America
Processing Method	Injection Molding
Attribute	Good Weather Resistance; High Impact Resistance
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(230 °C/3.8 kg)	3.9	g/10 min	ASTM D1238
(230 °C/3.8 kg)	3.9	g/10 min	ISO 1133
(220 °C/10.0 kg)	15	g/10 min	ISO 1133
(220 °C/10.0 kg)	15	g/10 min	ASTM D1238
Density, (23 °C, Method A)	1.06	g/cm ³	ISO 1183
Density - Specific Gravity	1.06	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (50 mm/min, 23 °C, Injection Molded, Flow)	43.0	MPa	ASTM D638
Tensile Stress at Yield, (23 °C, Injection Molded, Flow)	43.8	MPa	ISO 527-2
Flexural Modulus			
(23 °C, Injection Molded, Chord, Flow)	2170	MPa	ISO 178
(23 °C, Injection Molded, Chord, Flow)	2180	MPa	ASTM D790
Impact			
Charpy Impact Strength - Notched			
(-30 °C, Injection Molded)	8.2	kJ/m ²	ISO 179
(23 °C, Injection Molded)	18	kJ/m ²	ISO 179
Notched Izod Impact Strength			
(-30 °C, Injection Molded)	7.8	kJ/m ²	ISO 180
(23 °C, Injection Molded)	21	kJ/m ²	ISO 180
Notched Izod Impact			
(-30 °C, Injection Molded, Flow)	110	J/m	ASTM D256
(23 °C, Injection Molded, Flow)	260	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale, 23 °C, Injection Molded)	100		ASTM D785
Thermal			

Vicat Softening Temperature	102 °C	ISO 306
(Loading 1 (10 N))	102 °C	ASTM D1525
Deflection Temperature Under Load Unannealed (0.45 MPa)	89.3 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa)	76.6 °C	ISO 75-2/A
Deflection Temperature Under Load Unannealed (264 psi)		
(6.35 mm)	82.8 °C	ASTM D648
(3.18 mm, Injection Molded)	76.7 °C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (Injection Molded)	89.2 °C	ASTM D648
Coefficient of Linear Thermal Expansion (CLTE), Flow, (-30 to 80 °C)	9.3E-5 cm/cm/°C	ISO 11359-2
Coefficient of Linear Thermal Expansion (CLTE), Perpendicular, (-30 to 80 °C)	9.8E-5 cm/cm/°C	ISO 11359-2



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

Notes

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

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2018

Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.