

Technical Data Sheet

Diamond ABS 9501 5A113 SCARLET RED



Acrylonitrile Butadiene Styrene

Product Description

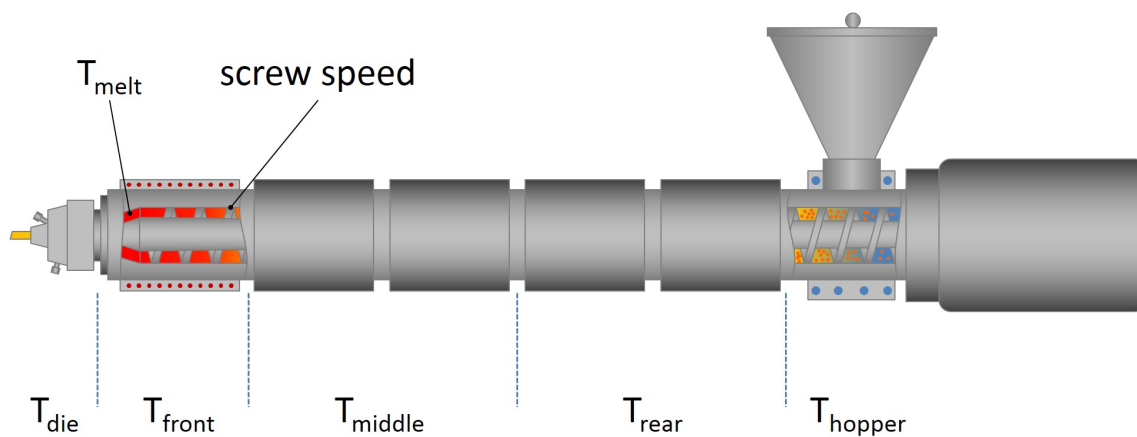
Diamond ABS 9501 5A113 SCARLET RED is a Acrylonitrile Butadiene Styrene material and is typically used in Extrusion, Sheet Extrusion, Thermoforming applications. Features include: Ultra High Impact Resistance.

Regulatory Status

For regulatory compliance information, see ABS 9501 5A113 SCARLET RED [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

Status	Discontinued
Availability	North America
Processing Method	Extrusion; Sheet Extrusion
Attribute	Ultra High Impact Resistance
Forms	Pellets
Appearance	Colors Available
Application	Marine Applications; Sheet; Thermoforming Applications

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (200 °C/5.0 kg, Procedure A)	0.40 to 1.2	g/10 min	ASTM D1238
Density - Specific Gravity	1.04	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	43.0	MPa	ASTM D638
Tensile Strength at Break	34	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, 2% Secant)	2300	MPa	ASTM D790
Tensile Elongation at Break	20	%	ASTM D638
Flexural Strength	69	MPa	ASTM D790
Impact			
Notched Izod Impact			
(23 °C)	520	J/m	ASTM D256
(-40 °C)	150	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	101		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	105	°C	ASTM D1525
Deflection Temperature Under Load Annealed (264 psi), (3.18 mm)	95.0	°C	ASTM D648
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	75.6	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi), (3.18 mm)	90.7	°C	ASTM D648
UL Information			
Flame Rating, (1.5 mm)	HB		UL 94
UL File Number	E119088		



Extrusion Parameters	Nominal Value	Units
Cylinder Zone 1 Temp.	177 to 185	°C
Drying Time	2.0 to 4.0	hr
Cylinder Zone 5 Temp.	218 to 232	°C
Suggested Max Moisture	<0.10	%
Cylinder Zone 3 Temp.	199 to 210	°C
Drying Temperature	80 to 85	°C
Cylinder Zone 2 Temp.	191 to 196	°C
Cylinder Zone 4 Temp.	213 to 218	°C

Notes

These are typical property values not to be construed as specification limits. The typical values for this product may have been tested on a natural grade.

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/>.

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