

Technical Data Sheet

Diamond ASA TW18B2 5971GRY



Acrylonitrile Styrene Acrylate

Product Description

Diamond ASA TW18B2 5971GRY is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Weather Resistance, and High Heat Resistance.

Regulatory Status

For regulatory compliance information, see ASA TW18B2 5971GRY [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

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

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	0.30	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	1.3	g/10 min	ASTM D1238
(220 °C/10.0 kg, Procedure A)	4.1	g/10 min	ASTM D1238
Density - Specific Gravity	1.12	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	48.8	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2430	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	85	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	102		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	129	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi)			
(3.18 mm)	96.1	°C	ASTM D648
(6.35 mm)	110	°C	ASTM D648



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/>.

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