Diamond ABS TM40 1402BLK

LyondellBasell Industries - Acrylonitrile Butadiene Styrene

General Information

Product Description

Diamond ABS TM40 1402BLK is a Acrylonitrile Butadiene Styrene material and is typically used in Extrusion, Injection Molding applications. Features include: High Heat Resistance.

General

Features	• High Heat Resistance	
Appearance	• Black	
Forms	• Pellets	
Processing Method	• Extrusion	• Injection Molding

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.07		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	0.40	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [2] (Yield)	7110	psi	ASTM D638
Tensile Stress (Yield)	6080	psi	ISO 527-2
Flexural Modulus - Tangent [3]	318000	psi	ASTM D790
Flexural Modulus - Chord	326000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179
-22°F	3.9	ft·lb/in²	
73°F	6.2	ft·lb/in²	
Notched Izod Impact			ASTM D256
-22°F	1.8	ft·lb/in	
73°F	3.0	ft·lb/in	
Notched Izod Impact Strength			ISO 180
-22°F	3.8	ft·lb/in²	
73°F	6.7	ft·lb/in²	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	104		ASTM D785
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	253	°F	ASTM D648
Deflection Temperature Under Load (66 psi, Unannealed)	255	°F	ISO 75-2/B
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.125 in	223	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	217	°F	
Deflection Temperature Under Load			ASTM D648
264 psi, Annealed, 0.125 in	241	°F	
Vicat Softening Temperature	284	°F	ASTM D1525
Vicat Softening Temperature	279	°F	ISO 306
CLTE - Flow	5.1E-5	in/in/°F	ASTM E831
CLTE - Transverse	6.1E-5	in/in/°F	ASTM E831

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Processing Information		
Injection	**Nominal Value**	**Unit**
Drying Temperature	176 to 194	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Moisture	0.10	%
Rear Temperature	392 to 482	°F
Middle Temperature	392 to 482	°F
Front Temperature	392 to 482	°F
Mold Temperature	104 to 176	°F
Injection Pressure	7010 to 11000	psi
Extrusion	**Nominal Value**	**Unit**
Drying Temperature	180 to 199	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	< 0.020	%
Suggested Max Regrind	40	%