

Diamond ABS 4012B

Acrylonitrile Butadiene Styrene
Network Polymers, Inc.

Message:

Diamond ABS 4012B is an Acrylonitrile Butadiene Styrene (ABS) product. It can be processed by blow molding and is available in North America. Characteristics include:
REACH Compliant
RoHS Compliant
WEEE Compliant

General Information			
Agency Ratings	EC 1907/2006 (REACH)		
	EU 2002/96/EC (WEEE)		
RoHS Compliance	RoHS Compliant		
Forms	Pellets		
Processing Method	Blow Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.04	g/cm ³	ASTM D792, ISO 1183/A
Melt Mass-Flow Rate (MFR) ¹			
220°C/10.0 kg	1.3	g/10 min	ASTM D1238
220°C/10.0 kg	2.1	g/10 min	ISO 1133
Molding Shrinkage			
Flow	0.40 to 0.60	%	ASTM D955
Across Flow	0.97	%	ISO 294-4
Flow	1.1	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	959	MPa	ISO 527-2/50
Tensile Strength			
Yield ²	39.0	MPa	ASTM D638
Yield	40.0	MPa	ISO 527-2/50
Break	32.0	MPa	ISO 527-2/50
Flexural Modulus			
Tangent ³	1870	MPa	ASTM D790
-- ⁴	1900	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C, 3.18 mm	340	J/m	ASTM D256
23°C	32	kJ/m ²	ISO 180/1A
Instrumented Dart Impact			ASTM D3763
-30°C	25.0	J	

23°C	27.0	J	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Unannealed	84.0	°C	ISO 75-2/B
1.8 MPa, Unannealed, 3.18 mm	84.4	°C	ASTM D648
1.8 MPa, Unannealed	101	°C	ISO 75-2/A
Vicat Softening Temperature	115	°C	ASTM D1525 ⁵
CLTE			ASTM E831
Flow	8.8E-5	cm/cm/°C	
Transverse	1.1E-4	cm/cm/°C	
Optical	Nominal Value		Test Method
Gardner Gloss (60°)	97		ASTM D523
Injection	Nominal Value	Unit	
Drying Temperature	80.0 to 85.0	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.10	%	
Rear Temperature	190 to 250	°C	
Middle Temperature	190 to 250	°C	
Front Temperature	190 to 250	°C	
Mold Temperature	40.0 to 80.0	°C	
Injection Rate	Moderate-Fast		
NOTE			
1.	Procedure A		
2.	51 mm/min		
3.	1.3 mm/min		
4.	2.0 mm/min		
5.	Loading 1 (10 N)		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

