

Technical Data

Product Description

(PC+ABS) blend; unreinforced; flame-retardant; injection molding grade; very easy-flow grade; Vicat/B 120 temperature = 96 °C; UL recognition 94 V-0 (1.5 mm); antimony-, chlorine- and bromine-free flame retardant.

General

Material Status	• Commercial: Active		
Literature ¹	<ul style="list-style-type: none"> • Technical Datasheet (Chinese (Traditional)) • Technical Datasheet (Chinese) • Technical Datasheet (English) • Technical Datasheet (German) 		
UL Yellow Card ²	• E41613-100459372		
Search for UL Yellow Card	<ul style="list-style-type: none"> • Bayer MaterialScience - Polycarbonates • Bayblend® 		
Availability	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Central America 	<ul style="list-style-type: none"> • Europe • Latin America • North America 	<ul style="list-style-type: none"> • South America
Additive	• Flame Retardant		
Features	<ul style="list-style-type: none"> • Antimony Free • Bromine Free 	<ul style="list-style-type: none"> • Chlorine Free • Flame Retardant 	<ul style="list-style-type: none"> • Good Flow
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value Unit	Test Method
Density	1180 kg/m ³	ISO 1183 ⁴
Melt volume-flow rate (240°C/5.0 kg)	40.0 cm ³ /10min	ISO 1133 ⁴
Molding Shrinkage		ISO 2577 ⁴
Flow	0.50 to 0.70 %	
Across Flow	0.50 to 0.70 %	
Water Absorption		ISO 62 ⁴
Saturation	0.50 %	
Equilibrium	0.20 %	

Mechanical	Nominal Value Unit	Test Method
Tensile modulus	2700 MPa	ISO 527-2 ⁴
Tensile Stress		
Yield	60.0 MPa	ISO 527-2 ⁴
Break	45.0 MPa	ISO 527-2/50
Tensile Strain		
Yield	3.5 %	ISO 527-2 ⁴
Break	> 40 %	ISO 527-2/50

Impact	Nominal Value Unit	Test Method
Notched Izod Impact Strength		ISO 180/A
-30°C	8.0 kJ/m ²	
23°C	13 kJ/m ²	
Unnotched Izod Impact Strength (23°C)	No Break	ISO 180

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		ISO 75-2 ⁴
0.45 MPa	90.0 °C	
1.8 MPa	81.0 °C	

Bayblend® FR3005 HF

Acrylonitrile Butadiene Styrene + PC

Bayer MaterialScience - Polycarbonates



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Thermal	Nominal Value Unit	Test Method
Vicat Softening Temperature		
--	96.0 °C	ISO 306/B120
50°C/h, B (50N)	94.0 °C	ISO 306 ⁴
CLTE		ISO 11359-2 ⁴
Flow	0.000076 cm/cm/°C	
Transverse	0.000080 cm/cm/°C	
Electrical	Nominal Value Unit	Test Method
Surface resistivity	1.0E+16 ohm	IEC 60093 ⁴
Volume resistivity	1.0E+14 ohm·m	IEC 60093 ⁴
Electric strength	35 kV/mm	IEC 60243-1 ⁴
Relative Permittivity		IEC 60250 ⁴
100 Hz	3.20	
1 MHz	3.10	
Dissipation Factor		IEC 60250 ⁴
100 Hz	0.0050	
1 MHz	0.0065	
Comparative tracking index	350	IEC 60112 ⁴
Flammability	Nominal Value Unit	Test Method
Flame Rating		UL 94
1.50 mm	V-0	
1.80 mm	5VB	
3.00 mm	5VA	
Fill Analysis	Nominal Value Unit	Test Method
Melt Viscosity ⁵ (260°C)	105 Pa·s	ISO 11443

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL IDES continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.

⁵ 1000 1/s

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Bayer MaterialScience - Polycarbonates

Where to Buy

Supplier

Bayer MaterialScience - Polycarbonates

Leverkusen, Germany
Telephone: +49-214-30-1
Web: <http://plastics.bayer.com/>

Distributor

Amco Polymers LLC

Telephone: 800-262-6685
Web: <http://www.amcopolymers.com/>
Availability: North America

Bay State Polymer

Telephone: 800-277-7797
Web: <http://www.baystatepolymer.com/>
Availability: North America

M. Holland Canada Company

Telephone: 905-665-1168
Web: <http://www.mholland.com/>
Availability: Canada

M. Holland Company

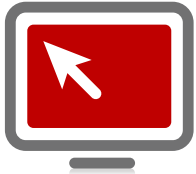
Telephone: 855-497-1403
Web: <http://www.mholland.com/>
Availability: Mexico, United States

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Telephone: 800-894-4266
Web: <http://polyonedistribution.com/>
Availability: Global



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– Birgit Elvardt Bader, Production Manager, Micotron

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– Kevin Chase, Owner & President, Chase Plastics



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