



Bayblend® Polycarbonate/Acrylonitrile Butadiene Styrene (PC+ABS)

Bumper to bumper, inside and out, Covestro is driving automotive innovation forward for comfortable, elegant interiors that offer integration with the latest technology and personalized features.

The interior has increasingly become a way for automakers to set themselves apart from the competition. As today's consumers look for comfortable, elegant interiors that offer integration with the latest technology and personalized features, automakers are seeking cost-effective materials and technology to meet this demand.

Film Insert Applications
Radio Bezel
Bezel Applications
Film Insert Applications
Side Panel
Side Panel – High or Low Gloss
Trim - Plating Applications
Structural Applications
Armrest – PU over mold
Center Console
A/C Vent Applications
Film Insert Applications

High-flow grades offer great finished part accuracy, dimensional stability and excellent impact strength.

Reinforced grades provide excellent flow properties for thin-wall applications that allow for light weight designs and design flexibility, yet while still providing exceptional impact and tensile strength.

Low-, High-gloss grades For unpainted interior applications, protect surfaces by offering UV and scratch resistance.

Covestro not only provides customers with high-quality materials, but also valuable technical expertise including assistance throughout the part design and manufacturing process. Experts from Covestro can help designers and engineers materialize a finished product from concept to commercialization. Whether it's material selection, designing a mold cooling system, calculating snap fit dimensions or fabricating a complex assembly, we have tools and experts that help simplify the process.

Click Links Below for More Information



Covestro's family of Bayblend® polycarbonate/acrylonitrile butadiene styrene (PC+ABS) blends offers an ideal combination of high mechanical performance, surface quality and durability at high temperatures while creating a variety of colors, surface grains and finishes. The Bayblend® automotive portfolio includes high-flow, reinforced and low-, high gloss grades, making it the material of choice for a number of interior applications including decorative bezels, air vents, airbag covers and consoles.

				KEY PROPERTIES*								
				High Flow Grades			Reinforced Grades			Special Grades		
Property	Test Condition	Unit	Standard	T60 XF	T65 XF	T85 XF	T95 MF	T88 GF-10	T88 GF-20	T85 HG	LGX300	W200 LG
Density		kg/ m ³	ISO 1183-1	1110	1130	1140	1240	1220	1290	1140	1125	1140
Melt viscosity	1000 s ⁻¹ ; 260 °C	Pa·s	b.o.ISO 11443-A	190	200	250	400	205	210	260	250	329
Melt volume-flow rate	260 °C; 5 kg	cm ³ / 10 min	ISO 1133	20	18	19	18	16	14	17	14	12
Vicat softening temperature	50 N; 50 °C/h	°C	ISO 306	113	118	128	140	132	128	128	116	123
Vicat softening temperature	50 N; 120 °C/h	°C	ISO 306	115	120	130	142	134	130	130	120	125
Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	99	102	107	124	121	119	108	94	100
Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	120	122	126	136	133	129	126	115	120
Yield Stress	50 mm/min	MPa	ISO 527-1,-2	50	54	54	66	100 [^]	120 [^]	55	52	49
Stress at Break	50 mm/min	MPa	ISO 527-1,-2	46	47	50	52	95 [^]	120 [^]	54	55	49
Tensile Modulus	1 mm/min	MPa	ISO 527-1,-2	2100	2300	2300	3350	4800	7200	2250	2150	2150
Izod notched impact strength	23 °C	kJ/m ²	ISO 180-A	45	45	48	9	8	8	49	52	55
Izod notched impact strength	-30 °C	kJ/m ²	ISO 180-A	38	35	35	9	6	8	34	14	43
Shrink Rate [†]	260 °C / MT 80 °C	%	b.o.ISO 2577	0.50-0.70	0.5-0.7	0.5-0.7	0.5-0.7	0.35-.055	0.3-0.5	0.55-0.75 [‡]	0.5-0.7	0.6-0.8
CLTE#, parallel	23 to 55 °C	10 ⁻⁴ / K	ISO 11359-1,-2	0.85	0.80	0.75	0.55	0.40	0.30	0.70	0.84	0.84
CLTE#, transverse	23 to 55 °C	10 ⁻⁴ / K	ISO 11359-1,-2	0.85	0.85	0.80	0.65	0.67	0.65	0.75	0.92	0.88

Notes

* Values are provided as general information only and are not part of product specifications

[^] test condition at 5 mm/min

[†] 105 x 105 x 3 mm specimen (unless otherwise noted)

[‡] 60 x 60 x 2 mm specimen

Coefficient of Linear Thermal Expansion



The manner in which you use, and the purpose to which you put and utilize our products, technical assistance and information (whether verbal, written or by way of product evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine, to your own satisfaction and requirements, whether our products, technical assistance and information are suitable for your intended uses and applications. This application-specific analysis must at least include testing to determine suitability from a technical as well as health, safety, and environmental standpoints. Such testing has not necessarily been done by us. Unless we otherwise agree in writing, all products are sold strictly pursuant to the terms of our standard conditions of sale which are available upon request. All information and technical assistance is given without warranty or guarantee and is subject to change without notice. It is expressly understood and agreed that you assume and hereby expressly release us from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance, and information. Any statement or recommendation not contained herein is unauthorized and shall not bind us. Nothing herein shall be construed as a recommendation to use any product in conflict with any claim of any patent relative to any material or its use. No license is implied or in fact granted under the claims of any patent.

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