Versaflex™ CE 3180

Thermoplastic Elastomer

PolyOne Corporation

Message:

Versaflex™ CE 3180 is targeted for consumer electronics applications where excellent abrasion resistance, chemical resistance and silky feel are required. Versaflex™ CE 3180 can also overmold to a variety of substrates including PC, ABS, PC/ABS, and Copolyester.

General Information	
Features	Low friction coefficient
	Good UV resistance
	Workability, good
	Good coloring
	Good wear resistance
	Good chemical resistance
	Good appearance
Uses	overmolding
	Thin wall parts
	Computer components
	Electrical/Electronic Applications
	Electrical appliances
	Thick wall fittings (parts)
	Soft touch application
	Soft handle
	Communication application
	Consumer goods application field
RoHS Compliance	RoHS compliance
Appearance	Black
	Natural color
Forms	Particle
Processing Method	Injection molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.17	g/cm³	ASTM D792
Molding Shrinkage - Flow (193°C)	0.60 - 1.2	%	ASTM D955

Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A, 10 sec)	79		ASTM D2240

Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain, 23°C)	8.00	MPa	ASTM D412

Tensile Strength (Break, 23°C)	16.0	MPa	ASTM D412
Tensile Elongation (Break, 23°C)	580	%	ASTM D412
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Apparent Viscosity (200°C, 11200 sec^-1)	23.0	Pa·s	ASTM D3835
Additional Information	**Nominal Value**	**Unit**	**Test Method**
Mass Loss - 500 Cycle Abrasion Resistance [1] (23°C)	2.0	mg	ASTM D3389
Injection	**Nominal Value**	**Unit**	
Drying Temperature	52 - 60	°C	
Drying Time	3.0 - 4.0	hr	
Suggested Max Moisture	< 0.030	%	
Suggested Max Regrind	20	%	
Rear Temperature	171 - 182	°C	
Middle Temperature	182 - 210	°C	
Front Temperature	188 - 216	°C	
Nozzle Temperature	193 - 221	°C	
Processing (Melt) Temp	193 - 218	°C	
Mold Temperature	13 - 29	°C	
Back Pressure	0.00 - 0.345	MPa	
Screw Speed	50 - 100	rpm	

Injection instructions

Typical colorant letdown ratios are 50:1 to 25:1 - loading levels should be as low as possible to minimize the effect on adhesion. A high color match consistency can be obtained by the use of precolored compounds available from GLS. Concentrates based on PVC should not be used. The final determination of color concentrate suitability should be determined by customer trials. Contact GLS for more information on appropriate color concentrate base resins.Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).Versaflex™ CE 3180 should not be left in the barrel for extended idle periods (greater than 5 minutes).Suggested Dewpoint: -40°FInjection Speed: 0.5 to 2 in/sec1st Stage - Boost Pressure: 500 to 1,000 psi2nd Stage - Hold Pressure: 20-60% of BoostHold Time (Thick Part): 2 to 4 secHold Time (Thin Part): 1 to 2 sec

NOTE

1. Abrasion wheel: H-18Mass Lost

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


WECHAT