Durethan® BCF 30 X H2.0 901510

Polyamide 6

LANXESS Corporation

Message:

PA 6, 30 % glass fibers/carbon fibers, injection molding, heat-aging stabilized, improved electrical conductivity

General Information	
UL YellowCard	E245249-101475486
Filler / Reinforcement	Glass and carbon fiber reinforced materials, 30% filler by weight
Additive	heat stabilizer
Features	Conductivity Thermal Stability
Processing Method	Injection molding

Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.33	--	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	15.0	--	cm³/10min	ISO 1133
Molding Shrinkage				ISO 2577
Vertical flow direction: 280°C, 2.00mm [1]	0.77	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 2.00mm [2]	0.080	--	%	ISO 2577
Flow direction: 280°C, 2.00mm [3]	0.22	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 2.00mm [4]	0.030	--	%	ISO 2577
Vertical flow direction: 3.00mm [5]	0.75	--	%	ISO 2577
Vertical flow direction: 120°C, 4 hours, 3.00mm [6]	0.10	--	%	ISO 2577
Flow direction: 280°C, 3.00mm [7]	0.15	--	%	ISO 2577
Flow direction: 120°C, 4 hours, 3.00mm [8]	0.030	--	%	ISO 2577

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	13500	6700	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	185	100	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	2.9	5.0	%	ISO 527-2/5
Nominal Tensile Strain at Break (23°C)	3.5	--	%	ISO 527-2/50
Flexural Modulus [9] (23°C)	11500	6800	MPa	ISO 178/A
Flexural Stress				ISO 178/A

3.5% strain, 23°C	--	145	MPa	ISO 178/A
23°C [10]	280	160	MPa	ISO 178/A
Flexural Strain at Flexural Strength [11] (23°C)	3.5	5.0	%	ISO 178/A
Burning Behavior [12] (> 1.00 mm)	passed	--		ISO 3795
ISO Shortname	PA 6, GHR, 14-140, (GF+CF) 30	--		ISO 1874
Residual Moisture Content	0.030 - 0.12		%	Karl Fisher
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	< 10	--	kJ/m²	ISO 179/1eA
23°C	11	--	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	60	60	kJ/m²	ISO 179/1eU
23°C	75	80	kJ/m²	ISO 179/1eU
Notched Izod Impact (23°C)	10	--	kJ/m²	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	60	60	kJ/m²	ISO 180/1U
23°C	65	65	kJ/m²	ISO 180/1U
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	1.70	--	J	ISO 6603-2
23°C	2.40	--	J	ISO 6603-2
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, not annealed	219	--	°C	ISO 75-2/B
1.8 MPa, not annealed	205	--	°C	ISO 75-2/A
8.0 MPa, not annealed	140	--	°C	ISO 75-2/C
Vicat Softening Temperature	214	--	°C	ISO 306/B120
Melting Temperature [13]	220	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	2.0E-5	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	9.0E-5	--	cm/cm/°C	ISO 11359-2
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity (23°C)	40	--	ohms·cm	ISO 3915
Comparative Tracking Index (Solution A)	150	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.800 mm)	HB	--		UL 94

Injection	Dry	Unit	Test Method
Drying Temperature - Dry Air Dryer	80.0		°C
Drying Time - Dry Air Dryer	2.0 - 6.0		hr
Processing (Melt) Temp	270 - 290		°C
Mold Temperature	80.0 - 120		°C
NOTE			
1.	60x60x2mm, 80°C MT, 600 bar		
2.	60x60x2mm		
3.	60x60x2mm, 80°C MT, 600 bar		
4.	60x60x2mm		
5.	150x105x3mm		
6.	150x105x3mm		
7.	150x105x3mm, 80°C MT, 500 bar		
8.	150x105x3mm		
9.	2.0 mm/min		
10.	2.0 mm/min		
11.	2 mm/min		
12.	US-FMVSS302		
13.	10°C/min		

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

WECHAT