Durethan® BC 700 HTS DUSXBL 900116

Polyamide 6

LANXESS GmbH

Message:

PA 6-Copolymer, non-reinforced, blow molding, heat-aging stabilized, improved impact strength, improved heat-aging stability

General Information				
Additive	heat stabilizer			
Features	Impact resistance, good Good heat aging resistance Thermal Stability			
Agency Ratings	EC 1907/2006 (REACH)			
Processing Method	Blow molding			
Physical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Density (23°C)	1.03	--	g/cm³	ISO 1183
Water Absorption				ISO 62
Saturated, 23°C	8.1	--	%	ISO 62
Equilibrium, 23°C, 50% RH	1.9	--	%	ISO 62
Hardness	**Dry**	**Conditioned**	**Unit**	**Test Method**
Durometer Hardness (Shore D, 23°C)	65	59		ISO 868
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	980	210	MPa	ISO 527-2/1
Tensile Stress (Yield, 23°C)	28.0	--	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	6.5	--	%	ISO 527-2/50
Flexural Modulus [1] (23°C)	980	230	MPa	ISO 178/A
Flexural Stress				ISO 178/A
3.5% strain, 23°C	30.0	7.00	MPa	ISO 178/A
23°C [2]	35.0	12.0	MPa	ISO 178/A
Flexural Strain at Flexural Strength [3] (23°C)	6.1	9.0	%	ISO 178/A
ISO Shortname	PA 6/66-HI, BHS, 14-010	--		ISO 1874
Residual Moisture Content	0.0 - 0.060		%	Karl Fisher
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	75	--	kJ/m²	ISO 179/1eA
23°C	110	--	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU

-30°C	No Break	--		ISO 179/1eU
23°C	No Break	No Break		ISO 179/1eU
Notched Izod Impact				ISO 180/1A
-30°C	70	--	kJ/m^2	ISO 180/1A
23°C	90	--	kJ/m^2	ISO 180/1A
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	No Break	--		ISO 180/1U
23°C	No Break	No Break		ISO 180/1U
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	50.0	--	J	ISO 6603-2
23°C	50.0	--	J	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force				ISO 6603-2
-30°C	4100	--	N	ISO 6603-2
23°C	3300	--	N	ISO 6603-2

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	53.0	--	°C	ISO 75-2/B
1.8 MPa, not annealed	48.0	--	°C	ISO 75-2/A
Melting Temperature [4]	212	--	°C	ISO 11357-3
Linear thermal expansion coefficient				ISO 11359-2
Flow: 23 to 55°C	2.0E-4	--	cm/cm/°C	ISO 11359-2
Lateral: 23 to 55°C	2.0E-4	--	cm/cm/°C	ISO 11359-2

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	230 - 280		°C
Mold Temperature	60.0 - 90.0		°C

NOTE	
1.	2.0 mm/min
2.	2.0 mm/min
3.	2 mm/min
4.	10°C/min

Recommended distributors for this material

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