

Durethan® DP 2131/20 H2.0 900051

Polyamide 6

LANXESS GmbH

Message:

PA 6, 20 % glass fibers, injection molding, heat-aging stabilized, improved surface finish, improved resistance to weathering

General Information				
Filler / Reinforcement		Glass Fiber,20% Filler by Weight		
Additive		Heat Stabilizer		
Features		Good Surface Finish		
		Good Weather Resistance		
		Heat Stabilized		
Processing Method		Injection Molding		
Physical	Dry	Conditioned	Unit	Test Method
Density (23°C)	1.28	--	g/cm ³	ISO 1183
Apparent Density	0.70	--	g/cm ³	ISO 60
Molding Shrinkage				ISO 2577
Across Flow : 280°C, 2.00 mm ¹	0.54	--	%	
Across Flow : 120°C, 4 hr, 2.00 mm ²	0.19	--	%	
Flow : 280°C, 2.00 mm ³	0.35	--	%	
Flow : 120°C, 4 hr, 2.00 mm ⁴	0.12	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	7600	--	MPa	ISO 527-2/1
Tensile Stress (Break, 23°C)	150	--	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	3.0	--	%	ISO 527-2/5
Flexural Modulus ⁵ (23°C)	6400	--	MPa	ISO 178/A
Flexural Stress				ISO 178/A
3.5% Strain,23°C	200	--	MPa	
23°C ⁶	225	--	MPa	
Flexural Strain at Flexural Strength ⁷ (23°C)	4.5	--	%	ISO 178/A
ISO Shortname	PA 6, GHR, 14-080, GF20	--		ISO 1874
Residual Moisture Content	0.030 to 0.12		%	Karl Fisher
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	< 10	--	kJ/m ²	
23°C	< 10	--	kJ/m ²	

Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	40	40	kJ/m ²	
23°C	45	60	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
-30°C	< 10	< 10	kJ/m ²	
23°C	< 10	< 10	kJ/m ²	
Unnotched Izod Impact Strength				ISO 180/1U
-30°C	35	--	kJ/m ²	
23°C	35	--	kJ/m ²	
Multi-Axial Instrumented Impact Energy				ISO 6603-2
-30°C	4.00	--	J	
23°C	5.00	--	J	
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	213	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	215	--	°C	ISO 75-2/A
Vicat Softening Temperature	> 200	--	°C	ISO 306/B120
Melting Temperature ⁸	222	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow : 23 to 55°C	2.3E-5	--	cm/cm/°C	
Transverse : 23 to 55°C	8.9E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	2.0E+15	2.0E+13	ohms	IEC 60093
Volume Resistivity (23°C)	3.0E+15	1.0E+12	ohms·cm	IEC 60093
Relative Permittivity				IEC 60250
23°C, 100 Hz	4.10	9.34		
23°C, 1 MHz	3.74	4.27		
Dissipation Factor				IEC 60250
23°C, 100 Hz	8.0E-3	0.22		
23°C, 1 MHz	0.018	0.065		
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.800 mm	HB	--		
1.60 mm	HB	--		
Injection	Dry	Unit	Test Method	
Drying Temperature - Dry Air Dryer	80.0		°C	
Drying Time - Dry Air Dryer	2.0 to 6.0		hr	

Processing (Melt) Temp	270 to 290	°C
Mold Temperature	80.0 to 120	°C

NOTE

1.	60x60x2mm, 80°C MT, 600 bar
2.	60x60x2mm
3.	60x60x2mm, 80°C MT, 600 bar
4.	60x60x2mm
5.	2.0 mm/min
6.	2.0 mm/min
7.	2 mm/min
8.	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

