Celanyl® A3 W GF30 BK 9005/Y

Celanese Corporation - Polyamide 66

Monday, October 30, 2023

General Information

Product Description

Polyamide 66 compound, 30% glass fiber reinforced, heat stabilized. UL certified HB@1.5mm.

General purpose grade, suitable for many technical applications. Medium term heat ageing resistance. Improved flowability.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Features	• Good Heat Resistance	• High Flow	
Automotive Specifications	• DAIMLER DBL 5408	• SAIC MOTOR SMTC-5-310-015	• VOLKSWAGEN 50133
Forms	• Granules		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60 to 0.90	--	%	
Flow	0.30 to 0.60	--	%	
Water Absorption				ISO 62
Saturation, 73°F	6.0	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 50% RH	1.7	--	%	
Viscosity Number				ISO 307
H2SO4 (Sulphuric Acid)	145	--	cm³/g	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.34E+6	783000	psi	ISO 527-1
Tensile Stress (Break)	21800	13100	psi	ISO 527-2/5
Tensile Strain (Break)	3.0	9.0	%	ISO 527-2/5
Flexural Modulus (73°F)	1.38E+6	--	psi	ISO 178
Flexural Stress (73°F)	39200	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	3.1	--	ft·lb/in²	
73°F	3.6	5.2	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	No Break	--		
73°F	No Break	--		

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Hardness	Dry	Conditioned	Unit	Test Method
Ball Indentation Hardness [2]	29000	--	psi	ISO 2039-1
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load				ISO 75-2/B
66 psi, Unannealed	482	--	°F	
Deflection Temperature Under Load				ISO 75-2/A
264 psi, Unannealed	464	--	°F	
Melting Temperature [3]	500	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity (73°F)	1.0E+13	--	ohms·m	IEC 62631-3-1
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.031 in	HB	--		
0.06 in	HB	--		
FMVSS Flammability [4] (66.9 mil)	B	--		FMVSS 302
Additional Information	**Dry**	**Conditioned**	**Unit**	**Test Method**
Emission of Organic Compounds	10.3	--	µgC/g	VDA 277
Odor	4.20	--		VDA 270

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 30s

[3] 20°C/min

[4] ISO 3795