DURACON® AW-01

Polyplastics - Acetal (POM) Copolymer + PE

General Information			
Product Description			
High Sliding			
General			
Features	• Abrasion Resistant • Copolymer	• Good Moldability • Low Friction	• Wear Resistant
UL File Number	• E45034		
Forms	• Pellets		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >POM+PE<		

Properties [1]			
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.37	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	9.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	8.0	cm³/10min	ISO 1133
Molding Shrinkage [2]			ISO 294-4
Across Flow : 0.0787 in	2.0	%	
Flow : 0.0787 in	2.3	%	
Water Absorption (24 hr, 73°F, 0.0394 in)	0.70	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	341000	psi	ISO 527-1
Tensile Stress	7830	psi	ISO 527-2
Nominal Tensile Strain at Break	25	%	ISO 527-2
Flexural Modulus	319000	psi	ISO 178
Flexural Stress	10900	psi	ISO 178
Coefficient of Friction			
Dynamic [3]	0.30		JIS K7218
vs. Steel - Dynamic [4]	0.16		ASTM D1894
Wear Factor			
87 psi, 3000 ft/min [5]	3.5	10^-10 in³·min/ft·lb·hr	JIS K7218
140 psi, 59 ft/min [6]	< 5.0	10^-10 in³·min/ft·lb·hr	JIS K7218
8.7 psi, 30 ft/min [7]	690	10^-10 in³·min/ft·lb·hr	ASTM D3702
140 psi, 59 ft/min [8]	990	10^-10 in³·min/ft·lb·hr	JIS K7218
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	2.7	ft·lb/in²	ISO 179/1eA
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	70		ISO 2039-2

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	176	°F	
CLTE - Flow (73 to 131°F)	7.2E-5	in/in/°F	Internal Method
CLTE - Transverse (73 to 131°F)	7.2E-5	in/in/°F	Internal Method
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	3.0E+14	ohms	IEC 60093
Volume Resistivity	3.0E+14	ohms·cm	IEC 60093
Electric Strength (0.118 in)	510	V/mil	IEC 60243-1
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	HB		UL 94
Additional Information	**Nominal Value**	**Unit**	
Color Number	CF2001/CD3501		

Notes

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

[2] 60x60x2mmt, Cavity Pressure 60 MPa

[3] vs M90-44, pressure 0.06MPa, 15cm/s

[4] vs CSteel, pressure 0.98MPa, 30cm/s

[5] vs M90-44, Material Side

[6] vs C-Steel, Steel Side

[7] vs M90-44, M90-44 Side

[8] vs C-Steel, Material Side