Zytel® 158L NC010

NYLON RESIN

DuPont Performance Polymers

Message:

Unreinforced Polyamide 612

General Information	
UL YellowCard	E41938-234358
Additive	Lubricant Mold Release
Features	Lubricated
Uses	Film Profiles Sheet
Agency Ratings	UL Unspecified Rating
Forms	Pellets
Processing Method	Casting Coating Extrusion Film Extrusion Injection Molding Profile Extrusion Sheet Extrusion
Multi-Point Data	Shear Stress vs. Shear Rate (ISO 11403-1) Viscosity vs. Shear Rate (ISO 11403-2)
Part Marking Code (ISO 11469)	>PA612<
Resin ID (ISO 1043)	PA612

Physical	Dry	Conditioned	Unit	Test Method
Density	1.06	--	g/cm³	ISO 1183
Molding Shrinkage				
Flow : 3.20 mm	1.1	--	%	Internal Method
Across Flow	1.4	--	%	ISO 294-4
Flow	1.3	--	%	ISO 294-4
Water Absorption				ISO 62
23°C, 24 hr, 2.00 mm	3.0	--	%	

Equilibrium, 23°C, 2.00 mm, 50% RH	1.3	--	%	
Viscosity Number	120	--	cm^3/g	ISO 307
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2400	1500	MPa	ISO 527-2
Tensile Stress (Yield)	62.0	52.0	MPa	ISO 527-2
Tensile Strain (Yield)	4.5	19	%	ISO 527-2
Nominal Tensile Strain at Break	35	> 50	%	ISO 527-2
Flexural Modulus	2050	1450	MPa	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	5.0	4.0	kJ/m^2	
23°C	4.0	6.0	kJ/m^2	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	No Break	--		
23°C	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-30°C	5.0	4.0	kJ/m^2	
23°C	4.0	6.0	kJ/m^2	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, Unannealed	135	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	62.0	--	°C	ISO 75-2/A
Glass Transition Temperature [1]	60.0	--	°C	ISO 11357-2
Melting Temperature [2]	218	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	1.2E-4	--	cm/cm/°C	
Flow : -40 to 23°C	9.0E-5	--	cm/cm/°C	
Flow : 55 to 160°C	1.7E-4	--	cm/cm/°C	
Transverse	1.2E-4	--	cm/cm/°C	
Transverse : -40 to 23°C	9.0E-5	--	cm/cm/°C	
Transverse : 55 to 160°C	1.8E-4	--	cm/cm/°C	
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	--	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	--	ohms·cm	IEC 60093
Electric Strength	36	36	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
100 Hz	3.60	--		

1 MHz	3.20	--		
Dissipation Factor				IEC 60250
100 Hz	0.014	--		
1 MHz	0.016	--		
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification				IEC 60695-11-10, -20
0.860 mm	HB	--		
1.50 mm	HB	--		
Oxygen Index	25	--	%	ISO 4589-2
Fill Analysis	Dry	Conditioned	Unit	
Melt Density	0.900	--	g/cm^3	
Specific Heat Capacity of Melt	2800	--	J/kg/°C	
Thermal Conductivity of Melt	0.19	--	W/m/K	
NOTE				
1.	10°C/min			
2.	10°C/min			

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