Iupital™ F30-03

Acetal (POM) Copolymer

Mitsubishi Engineering-Plastics Corp

PROSPECTOR®
www.ulprospector.com

Technical Data

Product Description			
Viscosity, Low; Injection general			
General			
Material Status	• Commercial: Active		
Literature [1]	• Technical Datasheet		
UL Yellow Card [2]	• E41179-231673		
Search for UL Yellow Card	• Mitsubishi Engineering-Plastics Corp • Iupital™		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• Good Flow	• Low Viscosity
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose	
Automotive Specifications	• CHRYSLER MS-DB-100 CPN2436 Color: Natural	• CHRYSLER MS-DB-100 CPN2794 Color: Black	• GM GMP.POM.021
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	27	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	23.0	cm³/10min	ISO 1133
Molding Shrinkage - Flow (3.00 mm)	2.0	%	Internal Method
Water Absorption - 60% RH (23°C)	0.22	%	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2900	MPa	ISO 527-2/1
Tensile Stress (Yield)	64.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	7.5	%	
Break	25	%	
Flexural Modulus [4]	2700	MPa	ISO 178
Flexural Stress [4]	91.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	6.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	150	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	156	°C	ISO 75-2/B
1.8 MPa, Unannealed	100	°C	ISO 75-2/A
Melting Temperature	166	°C	ISO 11357-3
CLTE			ISO 11359-2
Flow	1.1E-4	cm/cm/°C	
Transverse	1.1E-4	cm/cm/°C	

Form No. TDS-10733-en
Document Created: Thursday, January 31, 2019
Added to Prospector: November 2000
Last Updated: 11/26/2018

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Volume Resistivity	1.0E+14	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	32	kV/mm	
3.00 mm	19	kV/mm	
Dielectric Constant			IEC 60250
1 MHz	3.90		
100 MHz	3.90		
Dissipation Factor			IEC 60250
1 MHz	7.0E-3		
100 MHz	2.0E-3		
Comparative Tracking Index	600	V	IEC 60112

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.8 mm)	HB		UL 94

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	80	°C
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Rear Temperature	170	°C
Middle Temperature	180	°C
Front Temperature	190	°C
Nozzle Temperature	180 to 210	°C
Mold Temperature	60 to 80	°C
Injection Pressure	50.0 to 100	MPa
Injection Rate	Moderate	
Screw Speed	80 to 120	rpm

Notes

[1] These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

[2] A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

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

[4] 2.0 mm/min

Form No. TDS-10733-en
Document Created: Thursday, January 31, 2019
Added to Prospector: November 2000
Last Updated: 11/26/2018