

Iuplace™ AH40

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

General Information			
Product Description			
HB			
General			
Uses	- Automotive Applications - Automotive Electronics	- Electrical/Electronic Applications - General Purpose	
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.06	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/2.16 kg)	13	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 3.20 mm	0.50 to 0.70	%	
Flow : 3.20 mm	0.50 to 0.70	%	
Water Absorption (Saturation, 23°C)	0.070	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2500	MPa	ISO 527-1/1
Tensile Stress (Yield)	40.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	3.2	%	
Break	34	%	
Flexural Modulus ²	2500	MPa	ISO 178
Flexural Stress ²	76.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	14	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	150	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	110	°C	ISO 75-2/B
1.8 MPa, Unannealed	95.0	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	6.7E-5	cm/cm/°C	
Transverse	7.1E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Electric Strength			IEC 60243-1
1.00 mm	38	kV/mm	
3.00 mm	20	kV/mm	



Iupiace™ AH40

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94

Processing Information			
Injection	Nominal Value	Unit	
Drying Temperature - Hot Air Dryer	70 to 80	°C	
Drying Time - Hot Air Dryer	2.0 to 4.0	hr	
Rear Temperature	230 to 260	°C	
Middle Temperature	250 to 280	°C	
Front Temperature	250 to 280	°C	
Nozzle Temperature	240 to 260	°C	
Mold Temperature	50 to 90	°C	
Injection Pressure	20.0 to 150	MPa	
Injection Rate	Moderate		
Screw Speed	60 to 150	rpm	

