

# TAISU

## POM

### FM025E

Product information				
Color	IV			
Material Shape	Pellets			
Process	Injection molding			
Viscosity	High viscosity			
FR	HB			
Application	Automotive applications Buckle Electronic Appliance applications Home Appliance applications Bearing gear hardware pipe components Button zippers			
UL	Condition	Standard	Value	Unit
CTI		IEC 60112	0	PLC
HAI	All Color 0.8mm	UL 746A	0	PLC
HAI	All Color 3.0mm	UL 746A	0	PLC
HVTR		UL 746A	0	PLC
HWI	All Color 0.8mm	UL 746A	5	PLC
HWI	All Color 3.0mm	UL 746A	3	PLC
RTI	Elec All Color 0.8mm	UL 746B	110	°C
RTI	Elec All Color 3.0mm	UL 746B	110	°C
RTI	Imp All Color 0.8mm	UL 746B	90	°C
RTI	Imp All Color 3.0mm	UL 746B	90	°C
RTI	Str All Color 0.8mm	UL 746B	90	°C
RTI	Str All Color 3.0mm	UL 746B	100	°C
Arc Resistance		ASTM D495	5	PLC
Flame Rating	All Color 0.8mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	
Mechanical behavior	Condition	Standard	Value	Unit
Elongation	Break	ASTM D638	75	%
Flexural Strength		ASTM D790	950	kg/cm <sup>2</sup>
Flexural Modulus		ASTM D790	26000	kg/cm <sup>2</sup>
Izod Notch Impact		ASTM D256	7.6	kg-cm/cm
Tensile Strength	Yield	ASTM D638	610	kg/cm <sup>2</sup>
Thermal	Condition	Standard	Value	Unit
HDT	1.8MPa	ASTM D648	110	°C
HDT	0.45MPa	ASTM D648	158	°C
Melting Temperature	DSC	INTERNAL METHOD	165	°C
CLE		ASTM D696	8.45E-5	cm/cm/°C
Vicat Softening Temperature		ASTM D1525	162	°C

Physical property	Condition	Standard	Value	Unit
Water Absorption		ASTM D570	0.22	%
Shrinkage	3.0mm	INTERNAL METHOD	1.8~2.2	%
Density		ASTM D792	1.41	g/cm <sup>3</sup>
Melt Index		ASTM D1238	2.5	g/10min
Electrical properties	Condition	Standard	Value	Unit
Dielectric Constant	50Hz	IEC 60250	3.8	
Dielectric Constant	1KHz	IEC 60250	3.8	
Dielectric Constant	1MHz	IEC 60250	3.8	
Volume Resistivity		ASTM D257	1E+14	Ω.cm
Dielectric Strength	2.0mm	ASTM D149	24	KV/mm
Surface Resistivity		ASTM D257	1E+16	Ω
Hardness	Condition	Standard	Value	Unit
Rockwell Hardness	M(Scale)	ASTM D785	78	
Flammability	Condition	Standard	Value	Unit
Flame Rating	All Color 0.8mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	