

DSM

PA6

1010C2

Product information				
Manufacturer		DSM Engineering Plastics		
Material Shape		Pellets		
Process		Injection molding		
FR		V-2		
Material Attribute		Injection grade		
Features		Smooth surface finishHigh flowNucleatedGood moldabilityGood mould releaseLubricated		
Additives		Lubricant Nucleator		
Electrical properties	Condition	Standard	Value	Unit
CTI		IEC 60112	600	
Dielectric	Strength	IEC 60243	27	
Dielectric	Constant 100Hz	IEC 60250	4	
Dielectric	Constant 1MHz	IEC 60250	4	
Dissipation	Factor 100Hz	IEC 60250	0.011	
Dissipation	Factor 1MHz	IEC 60250	0.023	
Surface	Resistivity	IEC 60093		2E+14
Volume	Resistivity	IEC 60093	1E+13	
Flammability	Condition	Standard	Value	Unit
Flame	Rating All Color 0.81mm	UL94	V-2	
Flame	Rating All Color 1.5mm	UL94	V-2	
Flame	Rating All Color 3.0mm	UL94	V-2	
Mechanical behavior	Condition	Standard	Value	Unit
Charpy	Notch Impact 23°C 1eA	ISO 179	4.2	26
Charpy	Un-notch Impact 23°C	ISO 179	NB	NB
Elongation	Yield	ISO 527	4.2	21
Elongation	Break	ISO 527	18	50
Flexural	Strength	ISO 178	102	50
Flexural	Modulus	ISO 178	2800	1000
Tensile	Modulus	ISO 527	3400	1700
Tensile	Strength Yield	ISO 527	87	54
Physical property	Condition	Standard	Value	Unit
Density		ISO 1183	1130	kg/m³
Shrinkage	Flow	ISO 294	1.2	%
Shrinkage	xFlow	ISO 294	1.3	%
Viscosity	Number	ISO 307	118	cm³/g
Thermal	Condition	Standard	Value	Unit
CLE	Flow	ISO 11359	7E-5	cm/cm/°C

CLE	xFlow	ISO 11359	8E-5	cm/cm/°C
HDT	1.8MPa	ISO 75	61	°C
HDT	0.45MPa	ISO 75	150	°C
Melting	Temperature 10°C/min	ISO 11357	220	°C
UL	Condition	Standard	Value	Unit
Arc	Resistance	ASTM D495	5	PLC
Comparative	Tracking Index	IEC 60112	0	PLC
Dielectric	Strength	ASTM D149	20	KV/mm
Dimensional	Stability	UL746	1.7	%
HAI	ALL 0.81mm	UL 746A	0	PLC
HAI	ALL 1.5mm	UL 746A	0	PLC
HAI	ALL 3.0mm	UL 746A	0	PLC
HVTR		UL 746A	0	PLC
HWI	ALL 0.81mm	UL 746A	4	PLC
HWI	ALL 1.5mm	UL 746A	4	PLC
HWI	ALL 3.0mm	UL 746A	3	PLC
RTI	Elec ALL 0.81mm	UL 746B	130	°C
RTI	Elec ALL 1.5mm	UL 746B	130	°C
RTI	Elec ALL 3.0mm	UL 746B	130	°C
RTI	Imp ALL 0.81mm	UL 746B	65	°C
RTI	Imp ALL 1.5mm	UL 746B	70	°C
RTI	Imp ALL 3.0mm	UL 746B	75	°C
RTI	Str ALL 0.81mm	UL 746B	80	°C
RTI	Str ALL 1.5mm	UL 746B	80	°C
RTI	Str ALL 3.0mm	UL 746B	85	°C
UL	FlameRating ALL 0.81mm	UL94	V-2	
UL	FlameRating ALL 1.5mm	UL94	V-2	
UL	FlameRating ALL 3.0mm	UL94	V-2	
Volume	Resistivity	ASTM D257	1E+13	Ω.cm