

Formosa TAIRILOY AC610G

Formosa TAIRILOY AC610G is a high - performance material with FR (flame retardant) properties achieving V - 0 and 5VB ratings. It features high impact resistance and good processability, making it ideal for applications such as EV car charging equipment, electrical and electronic (E & E) applications, and battery holders.

Physical property		Standard	Value	Unit
Density	23°C	ASTM D792	1.18	g/cm ³
Shrinkage	Flow	ASTM D955	0.4~0.7	%
Melt Index	240°C 5kg	ASTM D1238	25	g/10min
Hardness		Standard	Value	Unit
Rockwell Hardness	R(Scale) 23°C	ASTM D785	120	
Mechanical behavior		Standard	Value	Unit
Tensile Strength	50mm/min	ASTM D638	640	kg/cm ²
Elongation	Break 50mm/min	ASTM D638	100	%
Flexural Strength	15mm/min	ASTM D790	1100	kg/cm ²
Flexural Modulus	15mm/min	ASTM D790	28000	kg/cm ²
Izod Notch Impact	23°C 3.2mm	ASTM D256	69	kg-cm/cm
Thermal		Standard	Value	Unit
HDT	Unannealed 1.8MPa 6.4mm	ASTM D648	89	°C
Vicat Softening Temperature	Unannealed 50°C/hr 50N	ASTM D1525	98	°C
Flammability		Standard	Value	Unit
Flame Rating	All Color 1.5mm	UL94	V-0	
Flame Rating	All Color 2.5mm	UL94	V-0	
Flame Rating	All Color 3.0mm	UL94	V-0	
Flame Rating	NC 3.0mm	UL94	V-0 5VB	
UL		Standard	Value	Unit
UL FlameRating	ALL 1.5mm	UL94	V-0	
UL FlameRating	ALL 2.5mm	UL94	V-0	
UL FlameRating	ALL 3.0mm	UL94	V-0	
UL FlameRating	NC 3.0mm	UL94	V-0 5VB	
HWI	ALL 1.5mm	UL 746A	0	PLC
HWI	ALL 2.5mm	UL 746A	0	PLC
HWI	ALL 3.0mm	UL 746A	0	PLC
HWI	NC 3.0mm	UL 746A	0	PLC
HAI	ALL 1.5mm	UL 746A	0	PLC
HAI	ALL 2.5mm	UL 746A	0	PLC
HAI	ALL 3.0mm	UL 746A	0	PLC
HAI	NC 3.0mm	UL 746A	0	PLC
RTI Elec	ALL 1.5mm	UL 746B	60	°C
RTI Elec	ALL 2.5mm	UL 746B	60	°C

RTI Elec	ALL 3.0mm	UL 746B	60	°C
RTI Elec	NC 3.0mm	UL 746B	60	°C
RTI Imp	ALL 1.5mm	UL 746B	60	°C
RTI Imp	ALL 2.5mm	UL 746B	60	°C
RTI Imp	ALL 3.0mm	UL 746B	60	°C
RTI Imp	NC 3.0mm	UL 746B	60	°C
RTI Str	ALL 1.5mm	UL 746B	60	°C
RTI Str	ALL 2.5mm	UL 746B	60	°C
RTI Str	ALL 3.0mm	UL 746B	60	°C
RTI Str	NC 3.0mm	UL 746B	60	°C
Comparative Tracking Index		IEC 60112	2	PLC
HVTR		UL 746A	3	PLC
Arc Resistance		ASTM D495	4	PLC

Injection molding	Value	Unit
Dry Temperature	90~100	°C
Dry Time	3~4	hr
Water Content Control	≤0.02	%
Zone1 Temperature	210~235	°C
Zone2 Temperature	230~255	°C
Zone3 Temperature	235~260	°C
Nozzle Temperature	225~255	°C
Melt Temperature	220~250	°C
Mould Temperature	80~90	°C
Back Pressure	5~15	kg/cm ²