

Formosa TAIRIREX® HP825S

Formosa TAIRIREX® HP825S is an HIPS suitable for extrusion molding, featuring high tensile strength, stress crack resistance, high heat distortion temperature, being odorless with low monomer residue, meeting FR HB fire - retardant standard, and used in manufacturing automotive door liners and refrigerator inner liners.

Physical property		Standard	Value	Unit
Density	23°C	ASTM D792	1.04	g/cm³
Density	23°C	ISO 1183	1.04	g/cm³
Shrinkage	3.2mm	ASTM D955	0.4~0.7	%
Melt Index	200°C 5kg	ASTM D1238	2.7	g/10min
Melt Index	200°C 5kg	ISO 1133	2.7	g/10min
Monomer Content			500	ppm
Mechanical behavior		Standard	Value	Unit
Tensile Modulus	23°C	ASTM D638	14000	kg/cm²
Tensile Modulus	23°C	ISO 527	1650	MPa
Tensile Strength	23°C	ASTM D638	240	kg/cm²
Tensile Strength	23°C	ISO 527	24	MPa
Elongation	23°C	ASTM D638	60	%
Elongation	23°C	ISO 527	65	%
Flexural Strength	23°C	ASTM D790	380	kg/cm²
Flexural Strength	23°C	ISO 178	33	MPa
Flexural Modulus	23°C	ASTM D790	15000	kg/cm²
Flexural Modulus	23°C	ISO 178	1250	MPa
Izod Notch Impact	23°C 6.4mm	ASTM D256	10	kg-cm/cm
Izod Notch Impact	23°C 6.4mm	ISO 180	97	J/m
Thermal		Standard	Value	Unit
HDT	Annealed 3.2mm Annealed at 80°C for 2 hours	ASTM D648	90	°C
HDT	Annealed 3.2mm Annealed at 80°C for 2 hours	ISO 75	91	°C
Temperature	Vicat Softening Annealed 3.2mm Annealed at 80°C for 2 hours	ASTM D1525	102	°C
Temperature	Vicat Softening Annealed 3.2mm Annealed at 80°C for 2 hours	ISO 306	102	°C
Flammability		Standard	Value	Unit
Flame Rating	All Color 1.5mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	