

TAIRIREX® MP6500

 Formosa Chemicals & Fibre Corporation - *High Impact Polystyrene*
General Information
Product Description

High Impact PS

Features: Medium impact

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• High Impact Resistance
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
UL File Number	• E162823

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.04		ASTM D792
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ³ (73°F)	341000	psi	ASTM D638
Tensile Modulus (73°F)	377000	psi	ISO 527-1/1
Tensile Strength ⁴ (73°F)	4120	psi	ASTM D638
Tensile Stress (73°F)	4350	psi	ISO 527-2/20
Tensile Elongation ⁴ (Break, 73°F)	40	%	ASTM D638
Tensile Strain (Break, 73°F)	27	%	ISO 527-2/20
Flexural Modulus ⁵ (73°F)	356000	psi	ASTM D790
Flexural Modulus ⁶ (73°F)	348000	psi	ISO 178
Flexural Strength ⁵ (73°F)	7970	psi	ASTM D790
Flexural Stress ⁶ (73°F)	7400	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F, 0.157 in)	2.8	ft·lb/in ²	ISO 179
Notched Izod Impact (73°F, 0.250 in)	1.5	ft·lb/in	ASTM D256
Unnotched Izod Impact Strength (73°F, 0.157 in)	2.7	ft·lb/in ²	ISO 180
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ⁷ (264 psi, Annealed, 0.125 in)	196	°F	ASTM D648
Deflection Temperature Under Load ⁷ (264 psi, Annealed, 0.157 in)	201	°F	ISO 75-2/A
Vicat Softening Temperature ⁸	212	°F	ASTM D1525 ⁹
Vicat Softening Temperature ¹⁰	208	°F	ISO 306/A50
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 to 0.07 in, All Color)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Residual Monomer	< 700	ppm	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	167	°F
Drying Time	1.0 to 2.0	hr



Rear Temperature	356 °F
Middle Temperature	383 °F
Front Temperature	401 °F
Nozzle Temperature	392 °F
Processing (Melt) Temp	338 to 419 °F
Mold Temperature	68 to 158 °F

Notes

¹ Typical properties: these are not to be construed as specifications.
² 23°C
³ 0.039 in/min
⁴ 0.20 in/min
⁵ 0.047 in/min
⁶ 0.079 in/min
⁷ 120°C/h
⁸ Annealed 80?*2hr, 1/8"
⁹ Rate A (50°C/h), Loading 1 (10 N)
¹⁰ Annealed 80?*2hr, 4mm

