TAIRIREX® HP825F

Formosa Chemicals & Fibre Corporation - *High Impact Polystyrene*

General Information

Product Description

High Impact PS

Features: High flow

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• High Flow	• 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)	9.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	9.0	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [3] (73°F)	341000	psi	ASTM D638
Tensile Modulus (73°F)	334000	psi	ISO 527-1/1
Tensile Strength [4] (73°F)	3560	psi	ASTM D638
Tensile Stress (73°F)	3770	psi	ISO 527-2/20
Tensile Elongation [4] (Break, 73°F)	56	%	ASTM D638
Tensile Strain (Break, 73°F)	33	%	ISO 527-2/20
Flexural Modulus [5] (73°F)	299000	psi	ASTM D790
Flexural Modulus [6] (73°F)	348000	psi	ISO 178
Flexural Strength [5] (73°F)	6540	psi	ASTM D790
Flexural Stress [6] (73°F)	6670	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F, 0.157 in)	4.6	ft·lb/in²	ISO 179
Notched Izod Impact (73°F, 0.250 in)	2.2	ft·lb/in	ASTM D256
Unnotched Izod Impact Strength (73°F, 0.157 in)	4.8	ft·lb/in²	ISO 180
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load [7] (264 psi, Annealed, 0.125 in)	194	°F	ASTM D648
Deflection Temperature Under Load [7] (264 psi, Annealed, 0.157 in)	205	°F	ISO 75-2/A
Vicat Softening Temperature [8]	212	°F	ASTM D1525 [9]
Vicat Softening Temperature [10]	210	°F	ISO 306/A50
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.06 in, All Color	HB		
0.06 to 0.12 in	HB		
0.12 in, All Color	HB		
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	374	°F
Middle Temperature	392	°F
Front Temperature	410	°F
Nozzle Temperature	401	°F
Processing (Melt) Temp	356 to 428	°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