TAIRIPRO® K2051

Formosa Chemicals & Fibre Corporation - *Polypropylene Homopolymer*

General Information

Product Description			
Injection Molding			
Features: Super high fluidity, High stiffness, Good luster, Nucleating agent, Low warpage			
General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Nucleating Agent		
Features	• High Flow • High Stiffness	• Homopolymer • Low Warpage	• Nucleated
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
RoHS Compliance	• RoHS Compliant		
UL File Number	• E162823		
Processing Method	• Injection Molding		

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density / Specific Gravity [2]	0.902		ASTM D792
Density (73°F)	0.900	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	50	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	50	g/10 min	ISO 1133
Molding Shrinkage - Flow (73°F)	0.014 to 0.018	in/in	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [3] (73°F)	5690	psi	ASTM D638
Tensile Stress (73°F)	5660	psi	ISO 527-2/50
Tensile Elongation [3] (Break, 73°F)	> 50	%	ASTM D638
Tensile Strain (Break, 73°F)	> 50	%	ISO 527-2/50
Flexural Modulus (73°F)	284000	psi	ASTM D790
Flexural Modulus (73°F)	284000	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.73	ft·lb/in	
73°F, 0.157 in	0.73	ft·lb/in	
Notched Izod Impact Strength			ISO 180
73°F, 0.125 in	19	ft·lb/in²	
73°F, 0.157 in	19	ft·lb/in²	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, 73°F)	110		ASTM D785
Rockwell Hardness (R-Scale, 73°F)	110		ISO 2039-2
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load [4] (66 psi, Unannealed, 0.250 in)	275	°F	ASTM D648
Deflection Temperature Under Load [4] (66 psi, Unannealed, 0.250 in)	275	°F	ISO 75-2/B

Processing Information

Injection	**Nominal Value**	**Unit**
Mold Temperature	86 to 122	°F
Injection Pressure	1140 to 1710	psi

[1] Typical properties: these are not to be construed as specifications.

[2] 23°C

[3] 2.0 in/min

[4] 120°C/h