

**TAIRIPRO® S1803**

Formosa Chemicals &amp; Fibre Corporation - Polypropylene Homopolymer

**General Information**
**Product Description**

Flat Yarn

Features: UV, Flat yarn

**General**

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Homopolymer • UV Resistant
Uses	• Yarn
Agency Ratings	• EC 1907/2006 (REACH) • FDA 21 CFR 177.1520
RoHS Compliance	• RoHS Compliant
UL File Number	• E162823
Processing Method	• Filament Extrusion

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity <sup>2</sup>	0.902		ASTM D792
Density (73°F)	0.900	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	2.3	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	2.3	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength <sup>3</sup> (73°F)	4790	psi	ASTM D638
Tensile Stress (73°F)	4790	psi	ISO 527-2/50
Tensile Elongation <sup>3</sup> (Break, 73°F)	> 200	%	ASTM D638
Tensile Strain (Break, 73°F)	> 200	%	ISO 527-2/50
Flexural Modulus (73°F)	199000	psi	ASTM D790
Flexural Modulus (73°F)	199000	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
73°F, 0.125 in	0.70	ft·lb/in	
73°F, 0.157 in	0.70	ft·lb/in	
Notched Izod Impact Strength			ISO 180
73°F, 0.125 in	18	ft·lb/in <sup>2</sup>	
73°F, 0.157 in	18	ft·lb/in <sup>2</sup>	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 73°F)	100		ASTM D785
Rockwell Hardness (R-Scale, 73°F)	100		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load <sup>4</sup> (66 psi, Unannealed, 0.250 in)	230	°F	ASTM D648
Deflection Temperature Under Load <sup>4</sup> (66 psi, Unannealed, 0.250 in)	230	°F	ISO 75-2/B

**Notes**
<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 23°C

<sup>3</sup> 2.0 in/min

<sup>4</sup> 120°C/h
