

# TAIREX® GP525N

General Purpose Polystyrene

Formosa Chemicals & Fibre Corporation

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

General Purpose PS

CHARACTERISTICS: Injection molding

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• Processing (English) • Technical Datasheet (English)
UL Yellow Card <sup>2</sup>	• E162823-319285
Search for UL Yellow Card	• Formosa Chemicals & Fibre Corporation • TAIREX®
Availability	• Asia Pacific • Europe • North America
Features	• General Purpose
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
UL File Number	• E162823
Processing Method	• Injection Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	7.0 g/10 min	7.0 g/10 min	ASTM D1238 ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	440000 psi	3040 MPa	ASTM D638 ISO 527-2
Tensile Strength (73°F (23°C))	5800 psi	40.0 MPa	ASTM D638 ISO 527-2
Tensile Elongation (Break, 73°F (23°C))	2.0 %	2.0 %	ASTM D638 ISO 527-2
Flexural Modulus (73°F (23°C))	483000 psi	3330 MPa	ASTM D790 ISO 178
Flexural Strength (73°F (23°C))	11300 psi	78.0 MPa	ASTM D790 ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm)	0.32 ft·lb/in	17 J/m	ASTM D256 ISO 180

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load <sup>4</sup> 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	189 °F	87.0 °C	ASTM D648 ISO 75-2/A
Vicat Softening Temperature	201 °F	94.0 °C	ASTM D1525 ISO 306

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm), NC)	HB	HB	UL 94

Additional Information	Nominal Value (English)	Nominal Value (SI)
Residual Monomer	< 700 ppm	< 700 ppm

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	167 °F	75 °C
Drying Time	1.0 to 2.0 hr	1.0 to 2.0 hr
Hopper Temperature	104 °F	40 °C
Rear Temperature	356 °F	180 °C
Middle Temperature	383 to 401 °F	195 to 205 °C



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Injection	Nominal Value (English)	Nominal Value (SI)
Front Temperature	392 °F	200 °C
Processing (Melt) Temp	338 to 419 °F	170 to 215 °C
Mold Temperature	68 to 158 °F	20 to 70 °C

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

<sup>3</sup> Typical properties: these are not to be construed as specifications.

<sup>4</sup> 80°C/2hr

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