

TECAST® L green - Stock Shapes (rods, plates, tubes)

Chemical Designation

PA 6 (Polyamide 6)

Colour green

Density

1.14 g/cm³

Fillers

oil

Main features

- → excellent wear properties
- → excellent strength and stiffness
- → high mechanical load capacity
- → very good slide and wear properties

Target Industries

- → construction industry
- → agricultural machinery
- → gear manufacturing
- → mining industry
- → conveyor technology
- → oil and gas industry

Mechanical properties	condition	value	unit	test method		comment
Tensile strength	@ 73 °F	9,000	psi	ASTM D 638		(1) Data obtained from public source (2) Data obtained from public source
Modulus of elasticity (tensile test)	@ 73 °F	350,000	psi	ASTM D 638		
Tensile strength at break	@ 73 °F	10,000	psi	ASTM D 638	1)	•
Elongation at yield (tensile test)	@ 73 °F	8	%	ASTM D 638	2)	•
Elongation at break (tensile test)	@ 73 °F	25	%	ASTM D 638		· ·
Flexural strength	@ 73 °F	12,500	psi	ASTM D 790		
Modulus of elasticity (flexural test)	@ 73 °F	350,000	psi	ASTM D 790		
Impact strength (Izod)	@ 73 °F	1.2	ft-lbs/in	ASTM D 256		
Rockwell hardness	@ 73 °F	100		ASTM D 785	_	
Thermal properties	condition	value	unit	test method	<u>-</u>	comment
Melting temperature		428	°F	ASTM D 2133		(1) Data obtained from public source (2) Data obtained from public source (3) Data obtained from public source
Service temperature	Intermittent	330	°F	-		
Service temperature	Long Term	200	°F	-		
Thermal expansion (CLTE)		4.0*10 ⁻⁵	in/in/°F	ASTM D 696	1)	
Specific heat		0.73	BTU/lb-F°	-	2)	
Thermal conductivity		2.57	BTU-in/hr-ft ² -	°F -	3)	
Electrical properties	condition	value	unit	test method	_	comment
surface resistivity		1.0*10 ¹⁴	Ω/square	ASTM D 257	1)	(1) Data obtained from public
volume resistivity		1.0*10 ¹⁴	Ω*cm	ASTM D 257	2)	source (2) Data obtained from public source
Other properties	condition	value	unit	test method		comment
Moisture absorption	@ 24 hrs, 73 °F	0.75	%	ASTM D 570		(1) Data obtained from public source
Flammability (UL94)		HB	%	-	1)	

[→] Resin specification:
NONE
Shapes specification:
ASTM D5989-11 S-PA0251

This information reflects the current state of our knowledge and is intended only to assist and advise. It is given without obligation or liability. It does not assure or guarantee chemical resistance, quality of products or their suitability in any legally binding way. Values are not minimum or maximum values, but guidelines that can be used for comparative purposes in material selection. They are within the normal range of product properties and do not represent guaranteed property values. Testing under individual application circumstances is always recommended. Data is obtained from extruded shapes material unless otherwise noted. References to FDA compliance refer to the resins from which the products were made unless otherwise noted. All trade and patent rights should be observed. All rights reserved. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com.

Date: 2016/09/22