



STAT-PRO® 9000

Material properties

Overview

STAT-PRO® 9000 is a next generation, high performance, static dissipative, carbon nanotube enhanced PEEK™ carbon compound transport carrier material. It offers excellent electrostatic discharge protection enabled by tight variation within the optimal surface resistivity range, excellent abrasion resistance, extremely low levels of molecular contamination, low moisture absorption, excellent dimensional stability, and excellent flexural and tensile integrity at very high temperatures. These attributes enable advanced performance and reliability in your processes, as well as precise and predictable wafer locations that benefit fabs with:

- Higher yields
- Greater fab efficiencies
- Greater throughputs
- Less tool downtime

STAT-PRO 9000 is excellent for interfacing from one process tool to another. While STAT-PRO 9000 has excellent resistance to a wide range of chemicals, it is not recommended for use in some strong acids (Please contact Entegris with chemical compatibility questions).

Features of STAT-PRO 9000

- Excellent resistance to abrasion
- Optimal surface resistivity range of 10^4 to 10^6 ohms/sq
- Extremely low levels of molecular contamination
- Resistance to elevated temperatures including 120°C (248°F) continuous usage temperature, and wafer insertion temperatures up to 340°C (644°F)
- Superior mechanical properties

Material Properties

	Parameter	Test Method	Value
Physical:	Specific gravity	ASTM D 792	1.43
	Flammability	UL94	V-0
Mechanical:	Izod impact notched	ASTM D 256	53.38 J/m (1.0 ft•lb/in)
	Izod impact unnotched	ASTM D 256	416.35 J/m (7.8 ft•lb/in)
	Tensile strength	ASTM D 638	151.68 MPa (22,000 psi)
	Tensile elongation	ASTM D 638	1.8%
	Tensile modulus	ASTM D 638	17,926.37 MPa (2,600,000 psi)
	Flexural strength	ASTM D 790	234.42 MPa (34,000 psi)
	Flexural modulus	ASTM D 790	16,547.42 MPa (2,400,000 psi)
Electrical:	Surface resistivity	ASTM D 257	$10^4 - 10^6$ Ω/sq
	Volume resistivity	ASTM D 257	$10^3 - 10^5$ Ω/sq
	Static decay	FTMS-101C 4046.1	0.02 sec

Note: This information is based on our experience to date and we believe it to be reliable. Data is obtained from specimens molded under controlled conditions from representative samples of the compound described. Properties may be affected by the molding techniques and by the size and shape of the item molded. Identical results cannot be guaranteed and no assurance can be implied that all molded articles have the same properties as those listed.

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ENTEGRIS, INC.

Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA
 Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022
 In North America 800 394 4083 | www.entegris.com



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