

Technical Data Sheet

Type: Carbo-Rite™ M-530 is a conductive, carbon-filled *high impact polystyrene* available as extruded sheet. Thermoformed trays are lightweight and easily formed into deep pockets that maintain uniform ESD protection. Carbo-Rite™ M-530 is high in stiffness and ensures uniform pocket formation, even when dimensional tolerance is critical.

Features: Good impact strength, high rigidity, high level of ionic extractable cleanliness

Applications: Hard disk drive component packaging, carrier tape packaging, electronics component packaging

Physical Properties	M-530	Unit	Test Method
Host Polymer	High Impact Polystyrene (HIPS)		
Filler	Carbon Black		
Color	Black		
Specific Gravity	1.09		ASTM D-792
Electrical Properties			
Surface Resistance	5.0 x 10 ⁴	Ω	ANSI/ESD STM11.11 (12%RH, 23°C)
Bulk Resistance	1.0 x 10 ⁴	Ω	ANSI/ESD STM11.12 (12%RH, 23°C)
Static Decay Rate: 1000 V to 10 V	< 0.1	Seconds	CPM (50%RH, 23°C)
Mechanical Properties			
Tensile Strength at Yield	3500 (24)	Psi (MPa)	ASTM D-638
Elongation at Break	16	%	ASTM D-638
Tensile Modulus	200,000 (1380)	Psi (MPa)	ASTM D-638
Flexural Modulus	300,000 (2070)	Psi (MPa)	ASTM D-790
Notched Izod impact (1/8")	3.5 (187)	ft-lb/in (J/m)	ASTM D-256
HDT at 66 psi	167 (75)	°F (°C)	ASTM D-648
HDT at 264 psi	144 (62)	°F (°C)	ASTM D-648

• These are typical values and should not be used for establishing product specifications. Contact Lubrizol if you need data for this purpose.

Supply Form and Standard Packaging

• Carbo-Rite™ M-530 is available in extruded sheet form only.

Product Format

• Carbo-Rite™ M-530 is available in custom extruded gauges from 0.5 to 2.5mm and widths of 450 to 650mm. Product is typically provided as rollstock with a smooth surface finish finished.

For further information refer to Lubrizol Advanced Materials processing guides.

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