MCMILLANCO

TECHNICAL DATA SHEET

Product No. MCM GNP-100

MCM GNP-100 Graphene Nanoplatelets

ELECTRONICS GRADE

High-purity, few-layer graphene nanoplatelet powder for electrically conductive and electronic applications.

≈99.5%	>85%	<10 Ω/sq	50 nm–5 µm
Carbon content (wt%)	Mono-, bi- and tri-layer content (by particle count)	Sheet resistance (4-point probe, 50 µm film)	Particle size range

PHYSICAL PROPERTIES

Form	Light powder
Color	Dark gray to black
Odor	Odorless
Carbon content	≈ 99.5 wt%
Moisture content	< 0.35 wt%
Oxygen content	< 1.0 wt%
Ash content	≈ 0.1 wt%
Dry powder resistivity	< 50 Ω·cm
Sheet resistance	< 10 Ω/sq (4-point probe; 50 µm film)
Particle size range	50 nm to 5 µm
Mono-, bi- and tri-layer content	> 85% (particle count)
Average particle thickness	< 1.7 nm (DLS/PSA estimate)
Particle layer count	< 10
Dry powder density	≈ 160 kg/m³
True density	2.2 g/cm³
Specific surface area	< 250 m²/g (DLS/PSA estimate)

*All chemical analyses were performed using applicable ASTM standard protocols.
DLS/PSA: dynamic light scattering / particle size analysis.

POTENTIAL APPLICATIONS

- Electrically conductive inks
- Optical displays and sensors
- Nanocapacitor technology
- Electrode materials for batteries
- Electrically conductive films and coatings
- Optical electronics
- Quantum dots
- Physico/biochemical sensors
- Photovoltaic cells
- Fuel cell energy storage
- High-frequency transistors
- Gas separation membranes

Safety. Read the MCM GNP-100 Safety Data Sheet (SDS) before handling. It covers hazards, protective equipment, storage and dust control.

FOR ADDITIONAL INFORMATION AND PRICING, CONTACT MCMILLANCO

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Request a quote

LIMITED WARRANTY INFORMATION. The information contained herein is offered in good faith and is believed to be accurate at the time of publication. MCMILLANCO, LLC assumes no liability for the information contained in this product information sheet. See the associated Safety Data Sheet (SDS) for more product information.

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