Single [Mono] Layer Graphene

Description: Single layer and mono-layer graphene made from renewable carbon negative processes that are a combination of patented and proprietary processing.

Under Ramen spectroscopy instrumentation, these materials will test equivalent to, or as an enhanced version of any graphite-based graphene material. High resolution microscopic evaluations reveal single-atom-thick hexagonal- or honeycomb-arranged cubical atoms.

The slight difference from a true platelet orientation offers the end use client unique formulation options. It is also pliable, strong, light weight, and conductive of both heat and electricity.

This material offers equivalent or better options in formulation to graphene and is often referred to as "synthetic" graphene. The enhanced properties are achieved through a patented bio-mass conversion and manufacturing process. The patented process allows for extreme purity, carbon negative materials, high quality, and consistency.

Client benchmark and test evaluations in coatings, CFRP, and many additional end use applications have displayed exceptional performance.

Typical Uses: Thermally and electrically conducting materials, reinforcing plastics for strength and modules, paint, batteries, 3D printing, etc.

Physical Properties:

Chemistry	99.9% Carbon
Form	Light Powder
Color	Dark Grey to Black
Odor	None
Carbon Content	99.9 wt%

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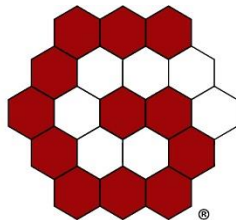|	
Moisture Content	<0.75 wt%
Oxygen Content	<2 wt%
Ash Content	<1.2 wt%
Sheet Resistivity	<30 ohm/square (4-pt probe, 50µm film)
Capacitance	200 Farads/g
Thermal Conductivity	2200 W/m/K
Particle Size	11µm
Optimum Particle Layer Count	1 to 20
Vol % Optimum Layer Count	>65%
Average Particle Thickness	<2.8 nm (DLS/PSA)
Average Particle Layer Count	<16
Dry Powder Density	400 kg/m^3
True Density	2.2 g/cm^3
Specific Surface Area	700 m^2/g

Notes: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof.

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