

# CORPORATE PROFILE

SHAPING TOMORROW WITH GRAPHENE SOLUTIONS

# **ABOUT GRANOPHENE**

# **Granophene: Pioneering Graphene Innovation**

Granophene, headquartered in Australia with a presence in Singapore and Malaysia, leads the way in delivering secure, reliable, and consistent graphene materials, pushing the boundaries of innovation through in-depth research and development. Our products are produced and made in Australia, where we leverage cutting-edge technology to ensure the highest quality. We collaborate closely with our clients to integrate graphene into novel applications, revolutionizing what's possible in electronics, energy storage, advanced materials, healthcare, and more.

### **Committed to a Sustainable Future**

At Granophene, we believe in progress that does not compromise our planet. We offer eco-friendly graphene products and focus on applications that promote environmental responsibility, enabling our clients to innovate sustainably.



### **Research Excellence**

We invest in R&D to stay at the forefront of technological advancements, ensuring our graphene products meet or exceed industry standards.



### **Sustainability Focus**

We develop graphene solutions that drive both high performance and environmental responsibility, maximizing the benefits of this radical material.



### **Diverse Product Range**

Our comprehensive portfolio of graphene products serves a wide array of applications, allowing us to meet the individual needs of each industry effectively.



### **Global Impact**

Granophene serves clients worldwide, partnering with industry leaders, and technology innovators to stay ahead of market demands.

# **Graphene Solutions for Every Challenges**

Discover how our graphene products can transform your industry and drive innovation:

# **Graphene (G)**

### **Unmatched Conductivity:**

Unparalleled electrical and thermal conductivity.

### **Extraordinary Strength:**

Remarkable mechanical strength and flexibility while remaining lightweight

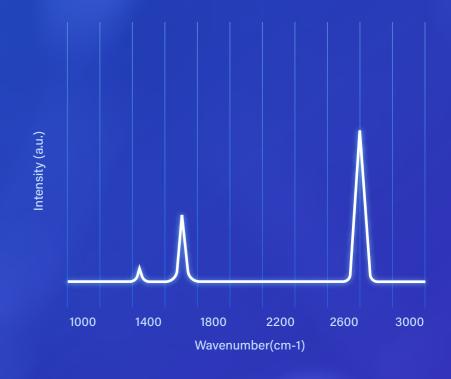
### **Boundless Integration:**

Versatile across multiple applications, from electronics to composites

### **Available Sizes:**

2g, 10g, 50g, 100g, 500g, 1kg

Graphene (G)		
Form	Powder	
Color	Black	
Odor	Odorless	
Particle Size	<0.4 μm	
Purity	99.50%	
Surface Area	1000 - 2000 m2/g	



# Reduced Graphene Oxide (rGO)

### **Enhanced Performance:**

Recovers more electrical conductivity during oxidation.

### **Maximize Usability:**

Tailored for specific industry needs with scalable production methods.

### **Transforming Materials:**

Crucial for advanced materials, including sensitive sensors and next-gen energy devices.

### **Available Sizes:**

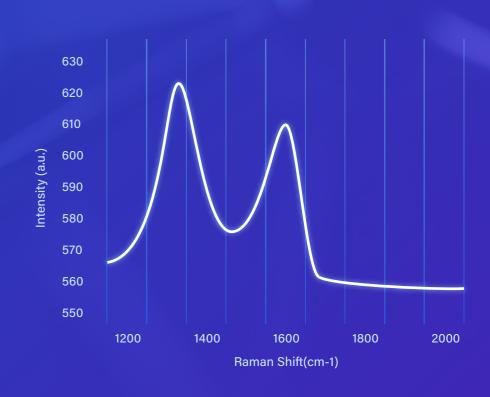
2g, 10g, 50g, 100g, 500g, 1kg

Reduced Graphene Oxide (rGO)		
Form	Powder	
Color	Black	
Odor	Odorless	
Particle Size	<10 um	

Particle Size <10 μm

Purity 99.50%

Surface Area <1000 m2/g



# **Graphene Oxide (GO)**

### **Molecular Adaptability:**

Customizable properties and precise chemical modifications

### **Filtration & Purification:**

High surface area for enhanced filtration and drug delivery.

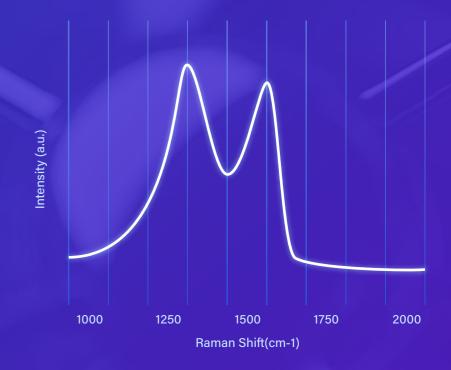
### **Biocompatible Innovation:**

Ideal for applications in water treatment, biomedical engineering, and advanced materials

### **Available Sizes:**

10g, 50g, 100g, 500g, 1kg

Graphene Oxide (GO)		
Form	Powder	
Color	Black	
Odor	Odorless	
Particle Size (D50)	<10 μm	
Purity	99.5%	
Surface Area	<500 m2/g	



# **Graphite Micro Powder (Gr)**

### **Excellent Resistance:**

Effective in resisting erosion and contamination.

### **Low Maintenance:**

Easy to replace or repair, prolonging the longevity of equipment.

### **Precise Machinability:**

Accurately machined to exceptionally close tolerance.

### **Available Sizes:**

10g, 50g, 100g, 500g, 1kg

Graphite (Gr)		
Form	Powder	
Color	Dark Grey	
Odor	Odorless	
Size	10 - 40 μm	
Layers	Multiple Layers (3-10 nm thick)	
Apparent Density	0.5-1.5g/cm3	
Purity	99.00%	
Surface Area	5 - 20 m2/g	

# TRANSFORMING INDUSTRIES WITH GRAPHENE

# **Catalyzing Industrial Innovation**

Explore how Granophene's advanced materials elevate performance, sustainability and efficiency across key sectors:

# **Energy**

### **Solar Cells:**

Enhances photovoltaic efficiency for better solar energy capture and conversion.

### **Energy Storage:**

Store up to 100 times more energy with rapid charge and discharge capabilities.

### **Energy Efficiency:**

Improve thermal regulation for homes, offices, aeronautical, and automotive applications.



# **EV & EV Battery**

### **Fast Charging:**

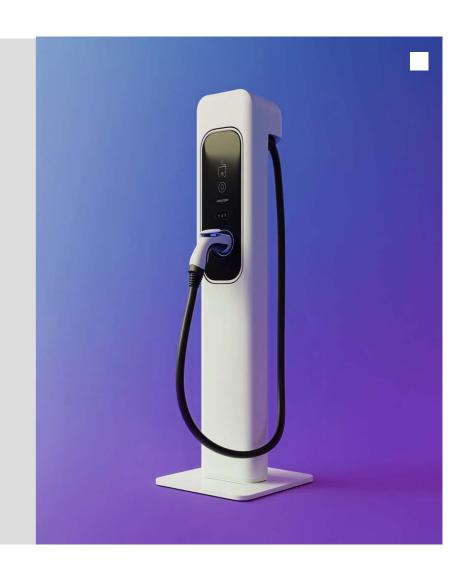
Reduces charging times, alleviate range anxiety and improve the convenience of EVs.

### **Lightweight Components:**

Decrease vehicle weight while bolstering its durability for better range, handling and performance.

### **Energy Recovery:**

Extends battery life, improve vehicle range, and maximize energy efficiency during operation.



# Healthcare

### **Drug Delivery:**

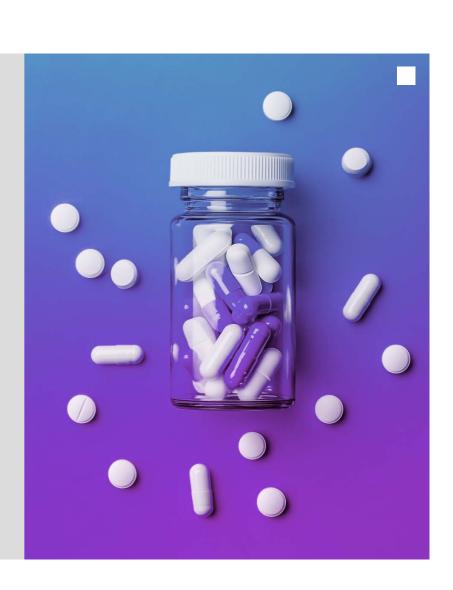
Advance targeted drug delivery systems for improved treatment outcomes.

### **Tissue Engineering:**

Mimic natural extracellular matrices to regenerate damaged tissue.

### **Graphene Sensors:**

Detect a wide range of biomarkers for early disease diagnosis and personalized medicine via biosensors.



# **Sports**

### **Advanced Equipment:**

Enjoy lightweight protection, reduced fatigue, and enhanced performance without compromising safety.

### **Next-Gen Sportswear:**

Weave graphene into fabrics for greater breathability, moisture-wicking, thermal regulation, and antimicrobial properties.

### **High-Performance Wearables:**

Utilize electronic tattoos with fitness trackers for precise monitoring vital signs, muscle activity and hydration levels.



### **Electronics**

### **High-Speed Transistors:**

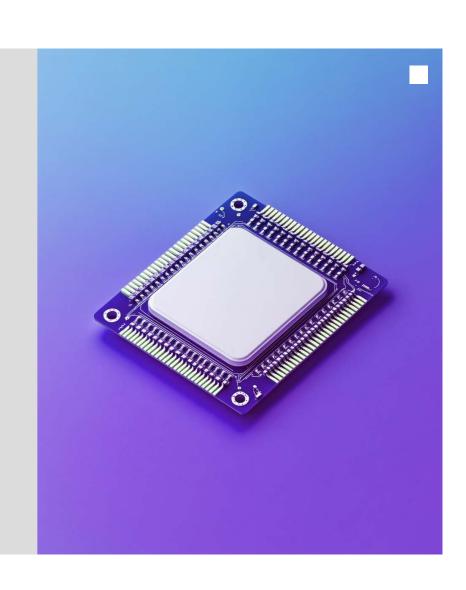
Achieve faster computation and reduce power consumption with exceptional electron mobility.

### **Flexible Display:**

Develop ultra-thin, durable, and bendable screens for smartphones, tablets, and wearable devices.

### **Precision Sensors:**

Improve sensor sensitivity and accuracy in navigation systems, medical imaging, and geological surveys.



# Food

### **Food Packaging:**

Extend shelf life and prevent contamination with antimicrobial properties for safer food storage.

### **Water Purification:**

Provide safe drinking water with graphene-based filtration allows molecules to pass through while effectively blocking contaminants.

### **Crop Protection:**

Shield crops from harmful elements and incorporate graphene-based sensors to monitor soil conditions, moisture levels and detect diseases.



# **Coating**

### **Corrosion Resistance:**

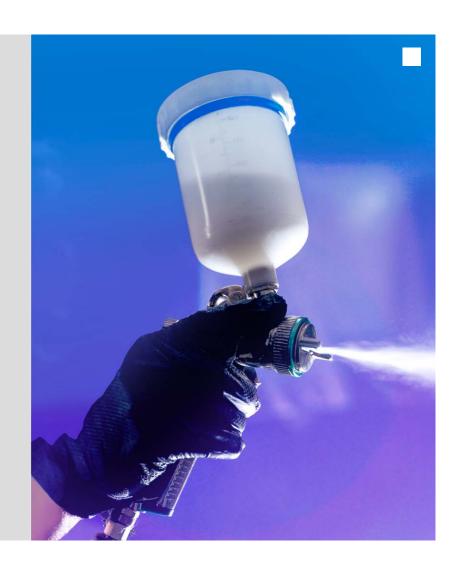
Shield industrial equipment and marine structures from rust and degradation in even the harshest environments.

### **Thermal Management:**

Keep electronics and industrial machinery cool and efficient, preventing overheating and extending equipment lifespan.

### **Conductive Surfaces:**

Protect sensitive electronics from electromagnetic interference and static discharge with electrically conductive coating.



# Lubricants

### **Friction Reduction:**

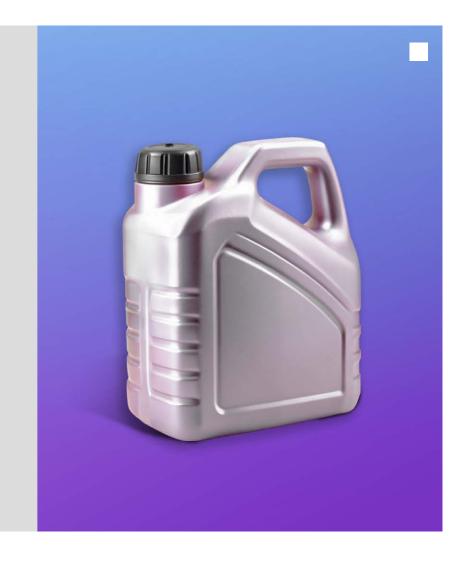
Decrease wear and energy loss in automotive engines and industrial machinery to improve overall efficiency.

### **Energy Efficiency:**

Maximize power transmission while minimizing energy consumption in machinery, reducing frictional losses and maintenance costs.

### **Thermal Stability:**

Maintain lubricant performance in extreme temperatures, ensuring reliable operation under any conditions.



## **Paint**

### **Weather Resistance:**

Improve durability and color retention in exterior paints for buildings and vehicles exposed to harsh elements.

### **Thermal Insulation:**

Enhance energy efficiency in buildings with heat-reflective and insulating paint solutions.

### **Anti-Bacterial Properties:**

Create a healthier environment with hygienic coatings designed to prevent microbial growth in healthcare facilities and food processing areas.



# **GRAPHENE PRODUCTS**

# **Available for Sample and Bulk Orders**



Product Type	Available Sizes
Graphene (G)	2g, 10g, 50g, 100g, 500g, 1kg
Reduced Graphene Oxide (rGO)	2g, 10g, 50g, 100g, 500g, 1kg
Graphene Oxide (GO)	10g, 50g, 100g, 500g, 1kg
Graphite Micro Powder (Gr)	10g, 50g, 100g, 500g, 1kg

### **Bulk Order**

Let us know your requirements and contact us at info@granophene.com.



Let us help you obtain and harness the power of graphene to innovate in your industry.

Granophene is ready to make a difference across all sectors.

# **Contact Us Today**

Discover how we can empower your next innovation:

www.granophene.com