



APPLIED GRAPHENE MATERIALS

Proud to be a leading innovator
in graphene dispersion and
application technology



WE ARE **GRAPHENE.**

INNOVATE. PERFORM. STAND OUT.

The exciting properties of graphene are well known, and Applied Graphene Materials (AGM) dispersion technology is the key enabler to benefitting from the use of Graphene Nanoplatelets (GNPs).

We pride ourselves on truly understanding how graphene works so that we can develop dispersions that deliver outstanding performance benefits in new and existing industrial products.

Our user-friendly **Genable®** graphene dispersions are formulated to ensure long term in-can stability.

- Environmentally friendly and easy to incorporate
- Safe to handle and available in a range of media
- Optimised to enhance performance

What makes AGM graphene dispersions unique?

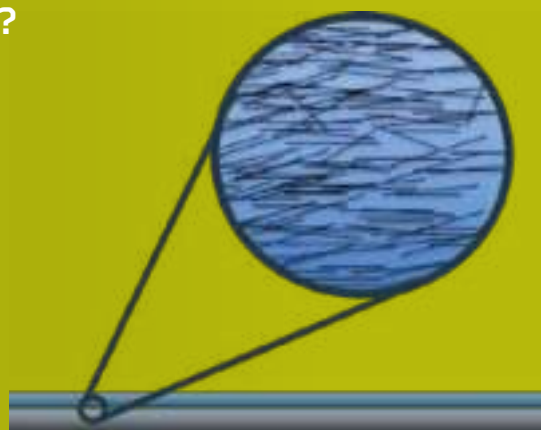
AGM's graphene is different because we create it in a unique way. Our exclusive "bottom up" method produces graphene by molecular growth from carbon precursors.

Our proprietary technology is proven to be consistent, scalable and enables us to develop a range of nanoplatelet types and structures for different applications. AGM's expertise in the handling and processing of graphene enables customers to benefit from its real potential through the easy incorporation of dispersions that offer value adding performance.

How do GNPs work in protective coatings?

- Utilise **Genable®** dispersion as a new, standalone, highly effective barrier additive.
- Benefit from graphene's outstanding synergistic properties in combination with existing active and passive additives.
- Improve mechanical and physical properties to enhance the performance of new or existing industrial systems.

Acting as a passive barrier additive in standard industrial paints, for example, the addition of just 0.1% graphene nanoplatelets will increase the tortuous path length of a corrosive species, such as water particles, through the coating by 120 times.



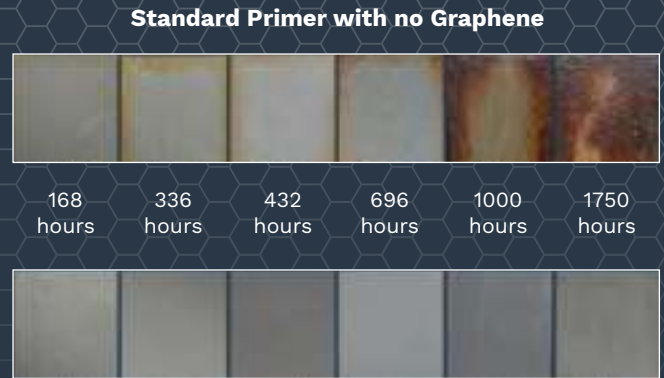
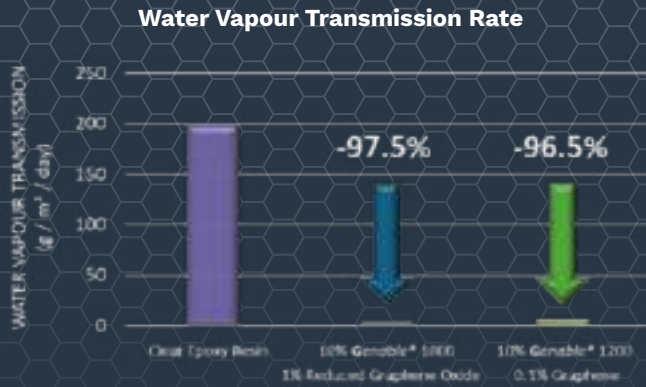
STABLE, EASY TO FORMULATE and
SAFE TO INCORPORATE for consistent,
reliable performance enhancements in
REAL LIFE applications.



Paints and coatings

Unique graphene additives dispersed in a range of resins and solvents offer outstanding performance in industrial coatings for longer lasting protection.

- Anti-corrosion and barrier performance
- UV protection
- Electrical conductivity
- Chemical resistance
- Synergies with existing active ingredients



Graphene-based Anti-Corrosion Primer

"AGM's deep understanding of coating technology and how best to effectively integrate graphene has played a major role in the successful launch of this product."

Nigel Alltimes
MD, Alltimes Coatings Ltd.



Innovate with graphene for transformational barrier performance

Polymers and composites

High aspect ratio graphene nanoplatelets enhance key properties through advanced materials engineering.

- Fracture toughness
- Thermal and electrical conductivity
- Fatigue resistance
- Anti-static dissipation
- Durability
- Weight reduction



Thermal adhesives and functional fluids

A range of thermally conductive, low density resin paste adhesive systems can also be designed for bonding, potting, sealing and encapsulation for space, electronics and automotive components.

Car care

The addition of graphene into car care systems can significantly enhance the properties of waxes, polishes and detailing products, offering increased protection over time.

- Hydrophobicity
- Chemical resistance
- UV protection
- Wet gloss finish
- Heat dissipation
- Anti-corrosion



INNOVATE WITH GRAPHENE

Customer collaboration

Along with our **Genable®** range of graphene dispersions, AGM continues to innovate directly with customers by offering bespoke solutions which are tailored to individual requirements.

Through close collaboration AGM ensures an optimum dispersion of graphene nanoplatelets is achieved in each customer's formulation.

AGM customers have direct access to our technical expertise for the evaluation and adoption of graphene into their system. Through our Innovation Accelerator we can share the development and testing burden, reducing the in-house lab time, eliminating costly external commercial test-houses and speeding up the time to market for your new product.



"AGM has been instrumental to our R&D process through technical support and a reliable supply of raw material."

Mike Cipriani
Founder of Infinity Wax



International partnerships

Established in 2010 as a spin-out from Durham University, AGM is headquartered at the Wilton Centre in Redcar, the premier science park in the North East of England offering one of Europe's largest R&D facilities.

AGM is listed on the FTSE AIM Stock Market and over the last 10 years has developed local, national and global partnerships with investors, research institutes, manufacturers and distributors.

AGM has EU REACH approval to supply large volumes of graphene products.



WE ARE GRAPHENE.



A DECADE OF INNOVATION

+44 (0)1642 438214
info@appliedgraphenematerials.com
appliedgraphenematerials.com

Applied Graphene Materials UK Ltd.
The Wilton Centre, Redcar, Cleveland, TS10 4RF, UK

