



**APPLIED
GRAPHENE
MATERIALS**

Genable Dispersions for Chemical Resistance



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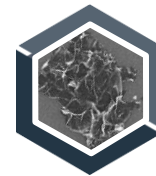
*Proud to be a leading innovator in graphene
dispersion and application technology*



WE ARE **GRAPHENE.**

How do Graphene Nanoplatelets Work?

Increased Length of Tortuous Path Through a Coating

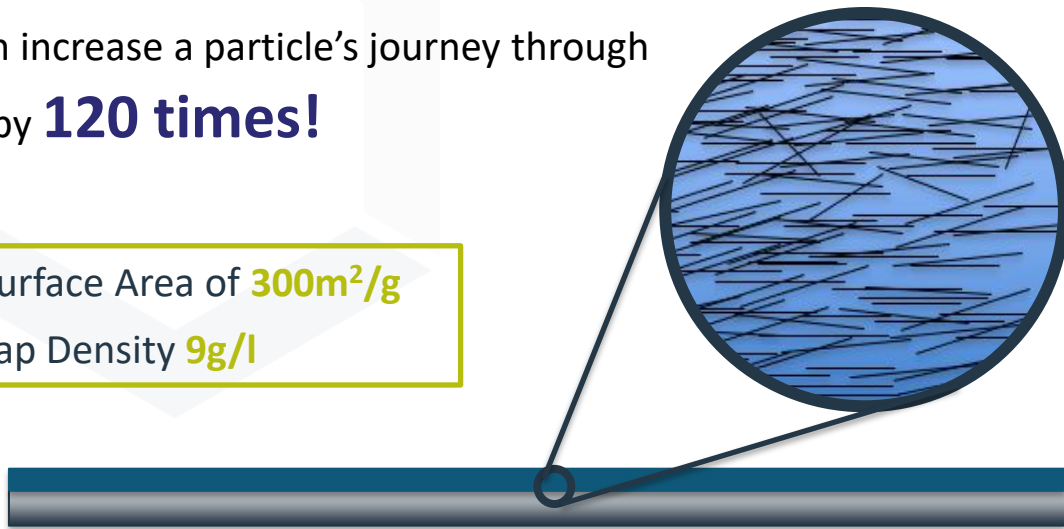


AGM's patent-protected technology produces Graphene Nanoplatelets that are approximately **25,000 times** thinner than a human hair.

The addition of just **0.1%** graphene can increase a particle's journey through a single coat of standard industrial paint by **120 times!**

- ⬡ Typically **3 - 5** Atomic Layers Thick
- ⬡ **4 nm** Platelet Thickness
- ⬡ **5%** Oxygen Content

- ⬡ Surface Area of **300m²/g**
- ⬡ Tap Density **9g/l**



Dispersion is Key to Performance Success

Industry Leading Know-How in the Dispersion of GNPs



Research has shown that the **dispersibility** of graphene nanoplatelets is essential to achieving success in an application.

Consistent supply of **high quality, repeatable** graphene dispersions is where AGM's **expertise** lies.

- ⬡ **Easy to Handle**
- ⬡ **Simple to Add**
- ⬡ **Safe to Use**
- ⬡ **Optimised for Performance**
- ⬡ **Excellent In-can Stability**
- ⬡ **Enabling industry to realise the potential of graphene in a simple, safe and easy to formulate way.**

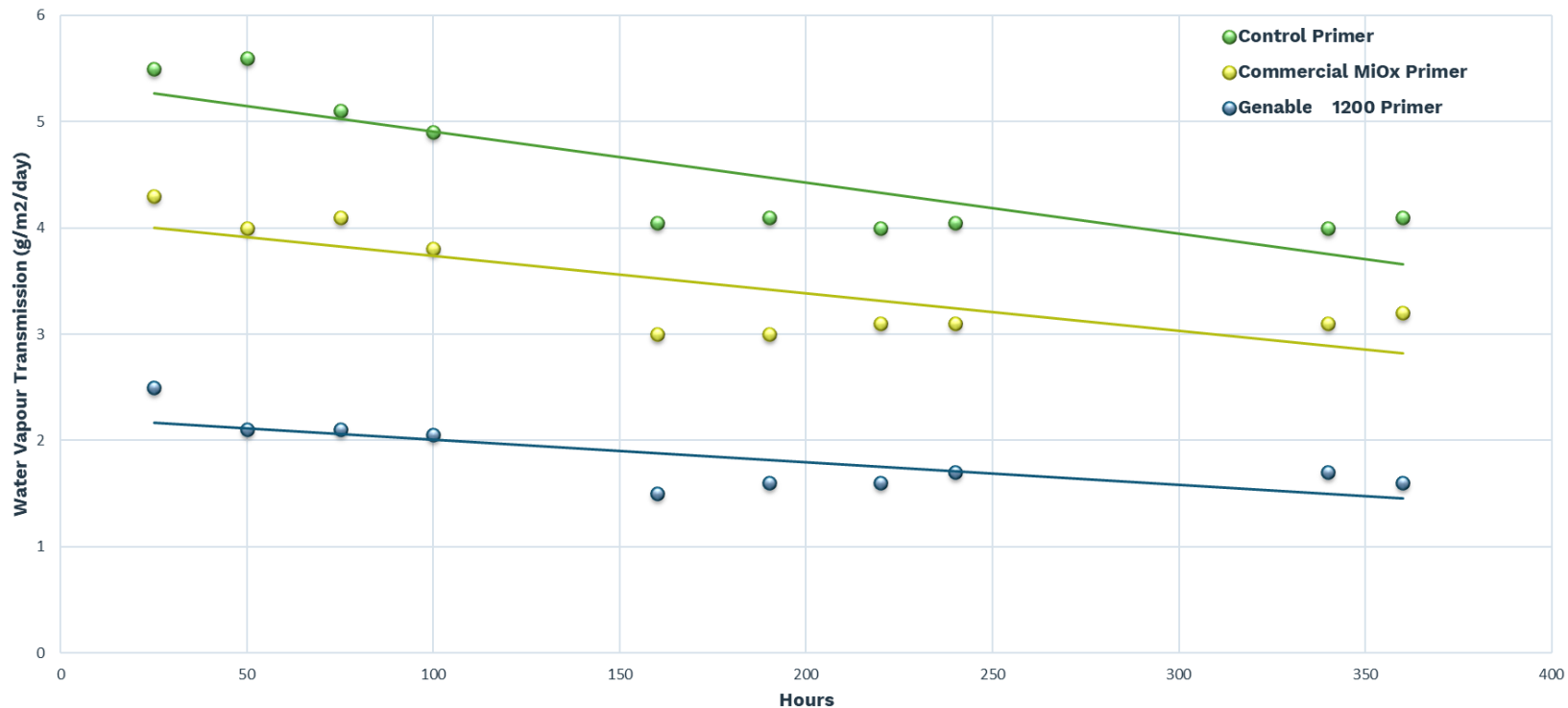


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What do Genable Dispersions do?

Water Vapour Transmission

Comparison Between Commercial MiOx and Graphene based Formulated Epoxy Primers



Chemical Resistance Results

Significant uplift in coating performance



Example Coating Performance in Lactic Acid – 28 Day Immersion Testing



Complete coating failure of glass flake control system



Glass flake + Genable graphene dispersion hybrid system



Genable graphene dispersion system

AGM compared the **chemical resistance performance** of graphene-enhanced epoxy resin coating formulations against an industry standard glass flake-filled alternative.

The addition of graphene resulted in **less blistering**, a marked improvement in **gloss retention** and greater **hardness**.

[Click To View Full Test Results](#)



Chemical Resistant Coatings

Why innovate with graphene?



Outstanding barrier performance



Flexibility in formulation for improved physical properties



Cost-competitive solutions



Further information

Get in touch



www.appliedgraphenematerials.com



+44 (0)1642 438214



info@appliedgraphenematerials.com

Andy Gent, Commercial Director

andy.gent@appliedgraphenematerials.com

Sam Whitehead, UK Sales Manager

sam.whitehead@appliedgraphenematerials.com

John Willhite, US Business Development Manager

john.willhite@appliedgraphenematerials.com

Andy Gent

Commercial Director



Sam Whitehead

UK Sales Manager



John Willhite

US Business
Development
Manager



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CONTACT INFORMATION

Applied Graphene Materials plc
The Wilton Centre, Redcar,
Cleveland, TS10 4RF

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

