

# First Graphene Ltd and Hexcyl to Collaborate on HDPE Oyster Baskets

## HIGHLIGHTS

- Supply of PureGRAPH® for development of high-density polyethylene (HDPE) products.
- Hexcyl Systems produce and sell a range of oyster baskets and long-line farming systems.
- PureGRAPH® enhanced HDPE targets greater mechanical strength and wear resistance for greater longevity.
- Collaboration will rapidly test the masterbatch with Hexcyl's manufacturer.

Advanced materials company, First Graphene Limited ("FGR" or "the Company") (ASX: FGR) is pleased to advise Hexcyl is collaborating with the Company to develop PureGRAPH® enhanced HDPE materials for use in Hexcyl's range of oyster baskets and long-line farming systems.

High-density polyethylene (HDPE) is a thermoplastic polymer produced from the monomer ethylene. With a high strength-to-density ratio, HDPE is used in the production of plastic bottles, corrosion-resistant piping, geomembranes and plastic timbers.

The incorporation of high performing PureGRAPH® graphene will seek to improve the mechanical properties of the HDPE, while at the same time provide greater longevity of the systems in high energy farming environments.

Hexcyl Systems offer oyster farmers and shellfish farmers a wide range of shellfish aquaculture products designed for Adjustable Longline Shellfish Farming and other tidal systems. The products are manufactured in Australia and sold globally.

Following the successful incorporation of PureGRAPH® into Hexcyl's materials by their master batch and injection moulding companies Hexcyl will be in a position to evaluate the products within its business which will benefit and FGR will then be in a position to determine the potential revenue implications. PureGRAPH® product will be provided to Hexcyl's master batch and injection moulding companies over the next two weeks . FGR will keep the market informed as the test work progresses.

## First Graphene Limited

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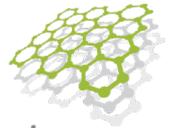
## ASX Symbol

FGR

FGROC

Frankfurt Stock Exchange

FSE:M11



**first** graphene

The world's leading graphene company

Craig McGuckin, Managing Director for First Graphene Ltd., said, *"Working with Hexcyl Systems with their requirement for additional mechanical improvement is yet another industry where PureGRAPH® may provide benefits to material enhancement."*

Garry Seidl, Managing Director for Hexcel Systems., said, *"We are looking forward to working with First Graphene in testing the incorporation of PureGRAPH® into the Hexcyl range of products."*

### **About First Graphene Ltd (ASX: FGR)**

*First Graphene Ltd. is the leading supplier of high-performing, graphene products. The company has a robust manufacturing platform based upon captive supply of high-purity raw materials and an established 100 tonne/year graphene production capacity. Commercial applications are now being progressed in composites, elastomers, fire retardancy, construction and energy storage.*

*First Graphene Ltd. is publicly listed in Australia (ASX:FGR) and has a primary manufacturing base in Henderson, near Perth, WA. The company is incorporated in the UK as First Graphene (UK) Ltd. and is a Tier 1 partner at the Graphene Engineering and Innovation Centre (GEIC), Manchester, UK.*

### **About Hexcyl Systems**

*Hexcyl Systems Pty Ltd was founded in 2007. A major problem with existing available infrastructure was the thousands of failing oyster baskets and clips, which were expensive to repair and replace creating an economic and environmental problem for many oyster farmers. The Hexcyl Oyster Basket delivers shellfish farmers a more robust shellfish basket with improved stock quality and reduced operating costs.*

### **PureGRAPH® Range of Products**

*PureGRAPH® graphene powders are available in tonnage volumes with lateral platelet sizes of 20µm, 10µm and 5µm. The products are high performing additives, characterised by their high quality and ease of use.*

*With authority of the board, this announcement has been authorised for release, by  
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