

# New deal to deliver graphene enhanced safety boots to mining industry

## Highlights

- **PureGRAPH®** to be supplied to Southeast Asia safety boot manufacturer under new multi-year agreement.
- Graphene enhanced masterbatch to be used in the **KRUSHERS®** brand of safety boot, destined primarily for workers in the Southeast Asia mining industry.
- Exclusive deal further strengthens First Graphene's presence in the global apparel industry following increase in demand.

First Graphene Limited (ASX:FGR; "First Graphene" or "the Company") has secured an agreement to provide PureGRAPH® for the development of premium graphene enhanced safety boots with Indonesian manufacturer PT Alasmas Berkat Utama for its KRUSHERS® brand of industrial safety boots.

The exclusive deal is expected to result in the supply of approximately 2.5 tonnes of PureGRAPH® 10 masterbatch over the first two years for use in manufacturing industrial safety footwear. PT Alasmas Berkat Utama will use this masterbatch to create graphene enhanced safety boots with enhanced polymer performance specifically for the Southeast Asia mining industry.

First Graphene has worked closely with its strategic compounding partner, Duomer, to develop the PureGRAPH® 10 Masterbatch suitable for thermoplastic polyurethane ("TPU") applications such as the KRUSHERS® brand of footwear.

This masterbatch will be added into the soles of the boots (see Figure 1) through an injection moulding method to enhance durability and extend the life of polymer and compound materials.



**Figure 1:** Addition of graphene enhanced masterbatch in the sole of KRUSHERS® work boots.

The graphene enhanced KRUSHERS® safety boots will be sold through a wide range of stockists as part of an initial commercial trial of the product, with the potential to expand the use of PureGRAPH® into other boot product lines.

PT Alasmas Berkat Utama has been developing personal protective equipment for 25 years and continues to extend distribution across Southeast Asia in the safety boot segment.

This new deal further strengthens First Graphene's position in the global apparel industry, following growing demand and interest in PureGRAPH® as an additive to improve durability of safety wear.

**First Graphene Managing Director and CEO Michael Bell said:**

*"We're excited to be working with PT Alasmas Berkat Utama and our long-standing partner Duromer Products to develop and supply high quality graphene enhanced safety boots."*

*This agreement reinforces growing industry awareness of the improvements our PureGRAPH® can make to the durability of safety boots and other workwear apparel to help withstand the harshest of workplace and environmental conditions.*

*We look forward to seeing the results of this collaboration as we help deliver long-lasting safety boots to workers across the booming Southeast Asia mining industry."*

**PT Alasmas Berkat Utama Factory Manager Usman Wang said:**

*"PT Alasmas Berkat Utama is very excited to be bringing this advanced polymer technology to our many customers in the Southeast Asia markets."*

*We are committed to improving the performance and durability of our footwear through this innovative advancement and look forward to a long and strategic partnership with First Graphene."*

**-Ends-**

**This release has been approved for release by the Chairman.**

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

*First Graphene Limited is focused on the development of advanced materials to help industry improve. The Company is a leading supplier of graphitic materials and product formulations with a specific commercial focus on large, high-growth global markets including cement and concrete; composites and plastics; coatings, adhesives, sealants and elastomers (CASE); and energy storage applications.*

*One of the key outcomes these advanced materials offer is the reduction of carbon dioxide emissions, whether directly through a reduction in output of these harmful greenhouse gases or lower energy usage requirements in manufacturing, or indirectly due to enhanced performance characteristics and extending the usable life of products.*

*First Graphene has a robust manufacturing platform based on captive and abundant supply of high-purity raw materials, and readily scalable technologies to meet growing market demand. As well as being the world's leading supplier of its own high performance PureGRAPH® graphene product range, the Company works with multiple industry partners around the world as a supplier of graphitic materials and partner to research, develop, test and facilitate the commercial marketing of a wide range of sector-specific chemical solutions.*

*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 where it has a strong R&D capability.*