

Nano Science, Technology and Industry Scoreboard

## **Gerdau Graphene Unveils Anti-abrasive Graphene-enhanced Architectural Paint**

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Gerdau Graphene has announced that it has created a new water-based graphene-enhanced architectural paint that is significantly more durable and resistant to abrasion than traditional paints. The new paint could be used on concrete, cement, metal, and asphalt, such as on sidewalks, bicycle lanes, garages, staircases, sports courts, and a wide array of commercial and industrial areas.

Its parent company, <u>Gerdau</u>, reportedly began applying the new paint to its factory floors in March, making it the world's first large-scale use of a water-based graphene-enhanced architectural paint. The company is already selling its proprietary graphene additives as development prototypes to major paint producers in the Americas.

"This new graphene-based floor paint is extremely abrasion-resistant and requires less maintenance and repainting over its lifetime compared with traditional paints. Based on the performance gains of our new product, it's clear that graphene will have a transformational impact on the entire paint industry," said Alexandre Corrêa, CEO of Gerdau Graphene. "We are proud to have painted our specialty steel plant in São Paulo in March and have since moved to paint all our assets in Brazil in the coming months. In addition, we have commercialized this new paint for key clients and partners in the construction industry to paint industrial, commercial, and residential building floors. We will continue to optimize our additives to meet the needs of customers and scale commercialization of these paint products globally."

The development of the graphene-based paint started in December 2021 and is the result of a partnership with Grafftex, a Brazilian paint manufacturer, and Polystell, a company focused on research and development of chemical additives. Gerdau Graphene created the graphene technology used to disperse graphene into a paint additive. Because graphene comes in a variety of types and shapes, each of which has unique properties, significant research and

testing was required to determine the best graphene format needed to produce a superior paint product. In addition, graphene additives need to be customized based on each paint manufacturer's unique formula and ingredients.

Gerdau Graphene is also working on additives for anti-corrosion paints, focusing on reducing heavy metals and fossil-based ingredients from light and heavy maintenance paints.

Read the original article on Graphene Info.