

Nano Science, Technology and Industry Scoreboard

## **Graphmatech Graphene-enhanced Solution Reduces Hydrogen Leaks**

2022-09-28 Graphmatech's AROS MB HDPE masterbatch line reduces hydrogen gas leaks by more than 40% for pipes and Type IV pressure vessels.

A graphene-enhanced, high-density polyethylene (HDPE) solution developed by <u>Graphmatech</u> is said to reduce hydrogen leakage from pipes and Type IV hydrogen pressure vessels by more than 40% (as shown by testing). All test results depend on masterbatch loading and production method. According to the company, this creates opportunities for grapheneenhanced solutions in fuel cell vehicles and airplanes, among other applications.

Materials currently used in Type IV pressure vessels and pipes for storage and transportation have the potential for serious leaks of hydrogen into the atmosphere. Graphmatech hopes its AROS MB HDPE product line, a ready-to-use granular mix. provides an easily accessible lane to clean mobility and, therefore, helps the industry use better pipes and pressure vessels. It is a part of the company's growing contribution to the green transition.

The AROS MB HDPE product line are masterbatches, suitable for extrusion, extrusion blow molding and injection molding. The line is now available in sample sizes of 1kg and 5kg off the shelf with technical data sheets.

Read the original article on CompositesWorld.