

Singapore offers unique insulating nanomaterial for pharma cold chain management

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Efficient and sustainable solution for the most demanding insulation applications



KrossLinker, a Singapore-based energy-efficiency-focused deep-tech advanced material startup, is designing and developing the world's most insulating nanomaterial, aerogel, that is low-cost, environmentally friendly, and scalable.

KrossLinker's first aerogel product, Cryar Aerogel Board, targets the cold-chain industry, where a positive market growth trend is expected. But this industry faces a \$35 billion revenue loss annually due to temperature excursions. A 2020 report indicated that packaging costs account for around 30% of the total spending of pharmaceutical cold chain companies. KrossLinker's Cryar provides an effective solution to combat this billion-dollar loss.

Cryar is a first-of-its-kind water-based, eco-friendly Si-Aerogel composite board developed through an energy-efficient process. The nano-porous structure of silica aerogel imparts Cryar with the best-in-class, and reliable thermal insulation performance, making it a safe, compact, and sustainable solution to transport valuable pharma products, including drugs, vaccines, clinical trial samples, and more.

KrossLinker has collaborated with several specialty packaging, logistic companies, and hospitals to commercialise and accelerate the adoption of Cryar aerogel shippers. It has been building strategic partnerships with market leaders to co-develop aerogel products to tackle similar problems in vertical markets, such as e-mobility and energy infrastructure.

The startup has just opened for Series A funding and is looking for strategic investors to participate in scaling up commercial aerogel production for the cold chain industry and expanding R&D to build the best solution for insulation applications.