

The Global Market for Nanofibers to 2027

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Abstracts

Nanofibers have exceptionally high surface area-to-volume ratio and high porosity, which makes them attractive materials for a range of applications. They have wide-ranging morphologies, and are produced using a variety of materials such as:

Natural polymers.

Synthetic polymers.

Carbon nanomaterials (carbon nanotubes, graphene, carbon nanofibers)

Semiconducting materials

Composite materials.

Chitin

Wood and other pulp (cellulose nanofibers)

Techniques such as centrifugal spinning, electrospinning, meltblowing and bicomponent spinning have been studied extensively for the production of nanofibers with varying degrees of commercial success. There have also been several new synthesis methods developed.

The market for nanofibers generally encompasses polymer nanofibers, alumina nanofibers and to a lesser extent carbon nanofiber and cellulose nanofibers. Main applications of nanofibers are:

Air/water filtration (membranes).

Composites.

Bio medical (bone/skin regeneration, tissue scaffolds, hydrogel bandages for woundcare).

Protective textiles and wearable electronics.

Energy Storage (battery separators, conductive additives for batteries).

Textiles.

The recent development and commercial production of cellulose nanofibers has opened up new markets.

Report contents include:

Market volume for nanofibers, historical and forecast to 2027.

Current products.

Stage of commercialization for nanofiber applications by company.

Market drivers, trends and challenges, by end user markets.

End user market assessment for nanofibers in composites, textiles, medical and healthcare, electronics, filtration, batteries, sensors, acoustics etc.

In-depth market assessment of opportunities for nanofibers including potential revenues, growth rates, pricing, most likely applications and market challenges.

In-depth company profiles, include products, capacities, production processes and commercial activities.

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