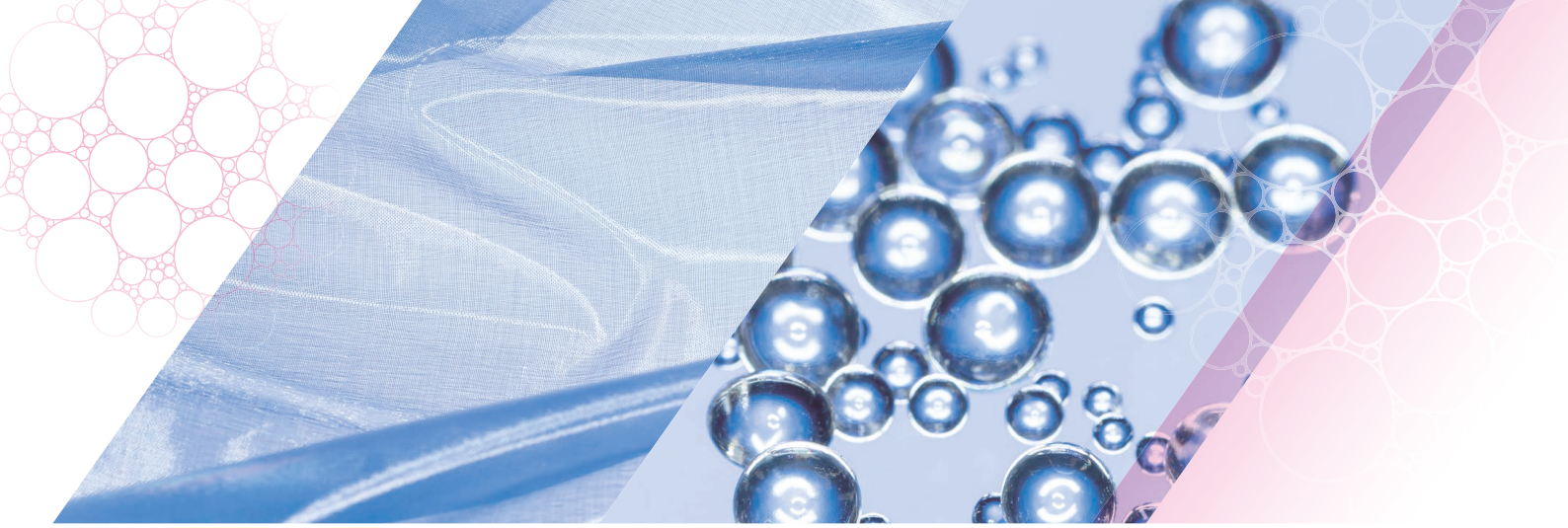


GLASS FIBERS

Performance Materials:Glass Fibers

Made with our advanced production technology, our glass fibers are widely used in electronics and Industrial materials.

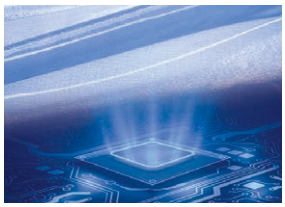
Our glass fibers are used in a variety of applications, including materials for electronic products, such as printed circuit boards for semiconductors and modules, building interior materials, nonflammable tents, and bag filters. Our unique yarn production facilities enable the production of one-of-a-kind yarns as well as the integrated production of yarns and fabrics. In the field of electronic materials, our yarns with a small fiber diameter for ultra-thin fabrics and yarns for special glass fabrics are extremely popular. In the area of industrial materials, we offer a wide range of products made with our weaving and post-processing technologies, as well as customized products to meet customer needs. Glass fiber is a performance material that holds huge potential.

GLASS BEADS

Performance Materials:Glass Beads

As Japan's leading glass beads manufacturer, Unitika offers extensive lines of products for various applications including road markings.

We are the leading manufacturer of glass beads in Japan, supplying products for road marking, blasting, grinding, dispersion, and filler applications. We also utilize our spheronization and high-precision classifying techniques in a wide variety of glass compositions to make products for spacer applications used in the electrical and electronics fields. Working to reduce the environmental impact of our products, we make glass bead products for filler applications in order to reduce the use of petroleum-based plastics and use recycled materials for approximately eighty percent of our production volume.



Finished glass fabrics for printed circuit boards

Unitika Ltd.

Our line of high value-added products includes ultra-thin and low expansion models. We put the wealth of our collective expertise to work in everything from material manufacturing to weaving and surface treatment with an eye to making peerless products.

Glass-fiber reinforced resin sheet

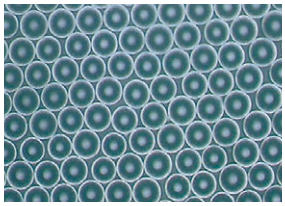
Unitika Ltd.

Glass-fiber reinforced resin sheet is a glass fiber-reinforced resin sheet. Due to its light weight and unbreakable property, its applications are expanding as a replacement for plate glass. Fire blocking, transparent, lightweight, and certified as a fire retardant material for use in buildings by the Japanese government, it can be used as an alternative to glass plates for smoke-proof vertical walls.

Illumination cover

Unitika Ltd.

This glass fabric has been specially treated for use as an illumination cover. It will not shatter or melt during a fire and is more durable than plastic. It has been certified as a fire retardant material for use in buildings by the Japanese government.



High Performance Glass Beads

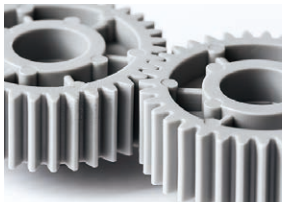
Unitika Ltd.

Glass beads have a highly sharp size distribution and are used in many kinds of spacer applications. They are especially suitable for applications that require heat resistance, load bearing, and insulation properties.

Glass Beads for road markings

Unitika Ltd.

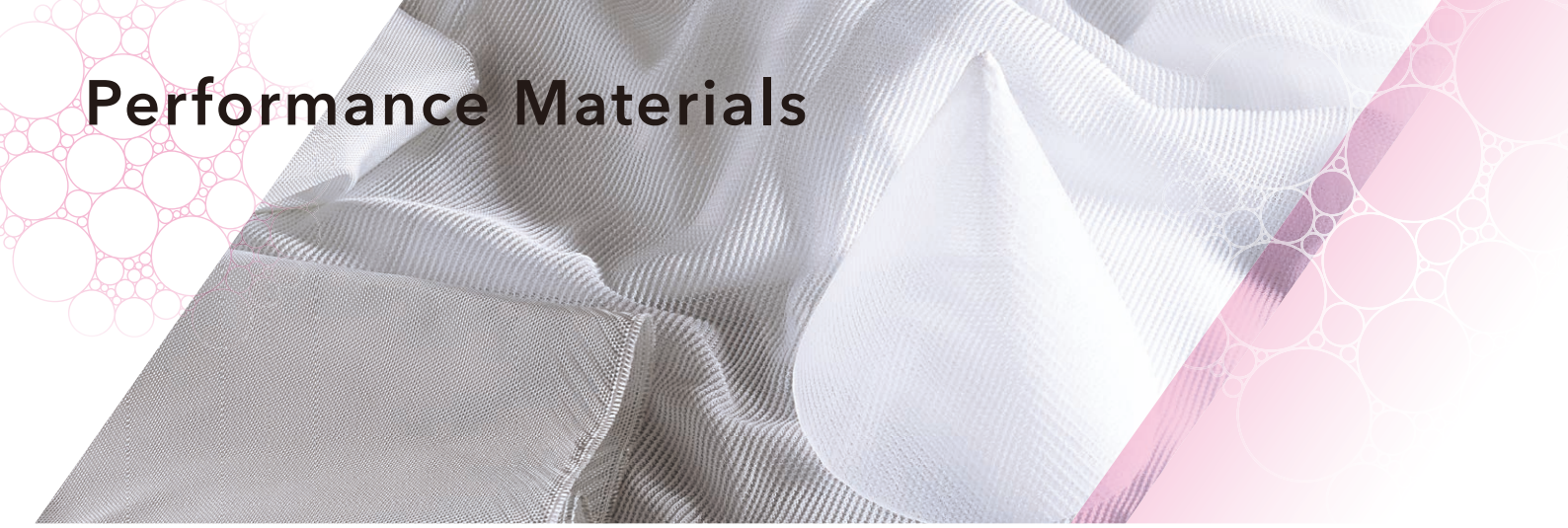
Glass beads are used in a wide range of road marking applications. Their retroreflective properties increase visibility at night, playing an important role in road safety. Recycled glass is used as a raw material.



Filler for Plastic

Unitika Ltd.

When used as a filler, glass beads demonstrate excellent filling and flowing properties due to their spherical shape. The silane coupling agent provides an optimal surface treatment for the resin that is used.



INDUSTRIAL FIBERS

Performance Materials:Industrial Materials

A wide variety of polymers make extensive product lines possible for many range of applications

Our strengths lie in the variety of polymers we use as raw materials, our composite fiber production technology, and our ability to quickly deliver a wide variety of products. These strengths enable us to supply staple fiber products for use in high-performance paper, medical and cosmetic applications, as well as industrial materials for a wide range of fields, including civil engineering and construction materials, fishing nets and lines, filters, and nylon hollow fiber membranes. Overseas, we are focusing on the European market to expand sales of binder fibers for filter applications. We are also focusing on differentiated products with high added value and environmentally friendly products to cultivate the market further.

MELSET

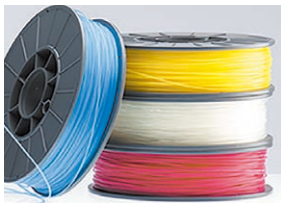
Unitika Ltd.

"Melset" is a high performance fiber made with a high-viscosity polyester resin for its core and a low-melting point polyester resin for its sheath. Featuring both elasticity and hardness, it can be molded into various shapes.

Polyamide hollow fiber membrane filter

Unitika Ltd.

Our hollow fiber membrane filter is made from polyamide that is highly resistant to organic solvents. It can be used in the clarification of a wide range of liquids, including aqueous fluids and organic solvents.



TERRAMAC　3D printer filament

Unitika Ltd.

We combined our expertise in plant-based polylactic acid (PLA) and melt-spinning technology to make filaments that can be formed into any desired shape. It features excellent transparency as well as consistent filament roundness and is resistant to breakage during storage and printing.

Fishing lines

Unitika Ltd.

We use our extensive line of polymers and melt-spinning technology to design fishing lines from the material development stage, so they are sure to suit their intended purpose and application. Our products are thoroughly field tested by fishing pros before commercialization.