

# RESIN

Polymers:Plastics

# Competitive edge in automotive, electrical, and electronic applications

Our outstanding technological capabilities enable us to offer engineering plastics tailored to customer needs, along with functional resins with features not found in our competitors' general-purpose products, to provide highly sophisticated, customized products. With a focus on the markets for automotive as well as electrical and electronic products where needs have changed rapidly in recent years, we are strengthening strategic sales activities by forming cross-organizational, application-specific teams designed to quickly respond to the needs of each area. While expanding sales in the U.S., China, and other Asian markets with a focus on "U-POLYMER", which has gotton recognition for its distinctiveness, we are also working with an eye to developing and expanding on high value-added products that will set the global standard.





# Polyethylene terephthalate (PET) resins

### Unitika Ltd.

Lightweight and excellent in strength and molding processability, our PET resins are used in a wide range of applications, including containers for cosmetics and medical use.



### elitel

### Unitika Ltd.

Unitika "elitel" are thermoplastic saturated copolyester resins used as laminate adhesives for flat cables connecting to electronic devices and other products. We have an extensive product lineup suited to various coating and film formation techniques.



# ARROWBASE

# Unitika Ltd.

"Arrowbase" is an innovative surfactant-free aqueous dispersion of a modified polyolefin resin. Arrowbase is finding wide use in various applications as a polyolefin resin that can be used as a coating with minimal environmental impact.



# XecoT

# Unitika Ltd.

"XecoT" is a highly heat-resistant polyamide resin made from castor beans. Its high heat resistance, low moisture absorption, and great sliding performance make "XecoT" a popular next-generation engineering plastic.



# U-POLYMER

# Unitika Ltd.

Unitika was the first in the world to develop industrialized polyarylate resin. It is used in a range of applications, including precision equipment, automobiles, medical equipment, food products, and everyday goods.



# Nylon 6 nanocomposite

# Unitika Ltd.

Nylon 6 nanocomposite is a composite material featuring superior rigidity, heat resistance, and moldability. It is used for automotive parts such as engine covers.

# **Performance Materials**

Leveraging a diverse range of materials and technologies to offer specialized functionalities, Unitika is capable of responding to any customized need.

Our performance material business handles nonwoven fabrics, activated carbon fibers, high performance porous plates, glass fabrics, glass beads, as well as a wide range of industrial materials.

While leveraging the features and functionalities of our full range of materials to flexibly respond to specific needs, we are also expanding into new fields of application with our high-performance and high value-added products that make full use of our composite material technologies.

# NON WOVEN

Performance Materials:Nonwovens

# Supplying a diverse range of spunbond and spunlace products to the world

Our polyester filament spunbond nonwovens feature excellent strength, heat resistance, as well as dimensional stability, and are used for agricultural and civil engineering materials, automotive parts, and more. We are expanding their applications through the use of special fibers and composites with other materials. Boasting the largest market share in Japan, our staple fiber spunlace nonwovens are made of 100% cotton and are widely used in skin care products and cloth wipes, as well as medical applications. Outside Japan, Thai Unitika Spunbond Co., Ltd. (TUSCO), our production and sales company in Thailand, is working to expand sales in North America, Europe, and Asia while shifting its focus to the kind of high value-added products we make in Japan. We are exploring the possibilities of nonwovens to expand applications and cultivate new demand.



# MARIX AX

#### Unitika Ltd.

"MARIX AX" is polyester spunbond nonwoven suitable for heat-molding application, which consists of bicomponent continuous filament. It has air permiability, thermal insulation, and sound insulation due to porous structure. It can be used for various application, e.g. automotive parts.



#### ilters

#### Unitika Ltd.

Our spunbond nonwovens are used as the base material of filters. The dimensional stability, heat resistance, and pleat ability of the "MARIX" polyester spunbond fabric are highly appreciated, and this product is used as the base material of various types of gas and liquid filters. In addition, "ELEVES", that has excellent laminating performance for a variety of filtering materials, is used as the base material of high-performance filters.



# **ELEVES**

# Unitika Ltd.

"ELEVES" is bi-component composite spunbond nonwoven fabric. Each individual filament has a structure that the sheath made of polyethylene covers the core made of polyester. The excellent features of these two materials are combined to make this product a high-performance nonwoven fabric sheet that can be used for a vast range of applications.



# Coarse Denir MARIX

# Unitika Ltd.

Made of filaments having a special structure, this high functionality nonwoven fabric offers excellent stiffness and high air permeability. Also, this material has superior wiping performance coming from special fiber structure.



# Cotton Spunlace

# Unitika Ltd.

"Cottoace" is spunlace nonwoven fabric produced by entangling cotton fibers firmly by water jets. This fabric is made of 100% cotton and manufactured by bonding fibers into a sheet only with hydraulic power without the use of a binder, which makes it safe for use in skin-touching products.



