

AS VERSATILE AS THE REQUIREMENTS OF OUR CUSTOMERS

OUR FIBERS AND THEIR PROPERTIES

OUR SYNTHETIC FIBERS:

Description	Properties	Application	Temperature* (continuous)
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STANDARD FIBERS:

PP POLYPROPYLENE semi-crystalline thermoplastic	<ul style="list-style-type: none"> » high dynamic load capacity » multitude of possible applications » chemically very resistant, low water and vapor permeability, good insulation parameters » high air permeability » easy to process » low weather and UV-resistance » no moisture absorption 	<ul style="list-style-type: none"> » clothing » flooring » automotive » battery-separators 	90°C
PES POLYESTER / RECYCLED PES Polymer with ester linkage	<ul style="list-style-type: none"> » enormously hard-wearing » highest abrasion and tear resistance » processing into thermoplastics, elastomers » very dimensionally stable » high strength, rigidity and hardness » very low moisture absorption » low sliding friction and sliding wear » good chemical resistance to acids » easy to bond and weld » recyclability (e.g. fibers from bottles) 	<ul style="list-style-type: none"> » automotive » acoustic insulation » 3D-molded parts » abrasives » seals » filtration 	150°C
PA POLYAMIDE thermoplastic material linear polymers with amide bonds	<ul style="list-style-type: none"> » technically significant » high strength » good chemical resistance » tear and abrasion resistant » low moisture absorption 	<ul style="list-style-type: none"> » clothing » flooring » automotive » abrasives » seals 	100°C

SPECIAL FIBERS:

PRE-OXIDIZED PAN oxidized acrylic fiber	<ul style="list-style-type: none"> » non-flammable » not melting » not softening » not dripping » high LOI value » high temperature resistance 	<ul style="list-style-type: none"> » flame retardant and insulating materials for refractory industry and brake pads in aircraft construction 	200°C – 250°C
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SPECIAL FIBERS:

CARBON FIBER by carbonization (heat treatment > 3.000 °C with the exclusion of oxygen) manufactured fibers from viscose or PAN	» extreme strength » high electrical conductivity » low specific weight	» automotive engineering » wind power » aircraft construction » all applications that require high strength at low weight	up to 2.000 °C
META-ARAMID high temperature resistant synthetic fiber	» incombustible (chars with light shrink) » decomposition temperature approx. 370°C	» protective clothing » decorative fabrics » floor coverings » hot gas filtration » technical textiles	180°C
PARA-ARAMID high strength and high temperature resistant synthetic fiber	» decomposition temperature approx. 500°C » non-flammable » very good mechanical characteristics » very good contact heat resistance	» friction linings » seals » protective clothing » cut and ballistic protection » replacement of steel in prestressed concrete	180°C
POLYTETRAFLUORETHYLENE (PTFE) manufactured in a special spinning process fiber	» basically insoluble » melting only with decomposition » 0% moisture absorption » incombustible » only melts at 340°C » very high chemical resistance » good electrical insulation » non-stick property » low stainability	» electrical insulation » filtration » protective suits » technical textiles	260°C
“SILVER FIBER” PA-fiber with silver vaporized on the surface	» high electrical conductivity » antibacterial effect	» protection against electro-smog » mouth and nose masks » clothing » functional textiles	100°C
POLYIMIDE technical special fiber	» low moisture absorption » insoluble in solvents » high chemical resistance » briefly exposed to temperatures of up to 400°C » infusible » flame retardant » high thermal stability	» protective clothing » hot gas filtration » seals » special technical textiles	220°C