



**Delivery
Programme**
United Kingdom
Ireland



K.D. FEDDERSEN
DISTRIBUTION

People. Think. Plastics.

K.D. Feddersen is your competent and reliable partner for engineering plastics. We meet your requirements with products, consulting and services of the highest quality. Together with you we think in solutions. We unite this under our motto "People. Think. Plastics.":



People – together we are successful

Our business is based on people – customers, partners, colleagues. We believe in strong relations and aim for mutual trust and excellence.



Think – our support, your success

New application? New design? New challenge? We think in terms of solutions and as a whole, offering the right plastic, the appropriate logistics concept and individual service: from the design of the application, its manufacture, its use to its recycling at the end of its life. Sustainability, circular economy, a sound environment and satisfied customers are important to us.



Plastics – shaping the future

Plastics are versatile and enable innovations for our daily lives. They stand for modern design, are highly functional and protect the environment when used, applied and recycled properly.

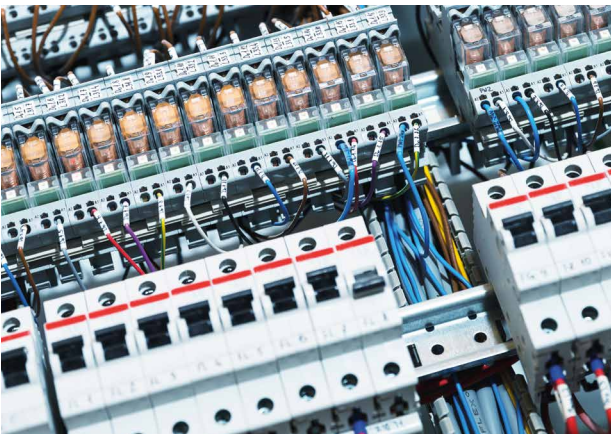
Applications and segments

The right material for every application. With our extensive portfolio, we offer the solution for your application.



Mobility

We have the materials and the know-how for automotive applications in the areas of interior, exterior, chassis and under the hood. Whether it is for combustion engines, e-mobility, public transportation, or high fire protection requirements including UL listing – trust our support.



E&E

In electrics and electronics, or E&E for short, plastics not only ensure safety thanks to their mechanical, heat-resistant and insulating properties. They are also frequently used for visible parts and must therefore meet optical requirements.



Agriculture

The possible applications of engineering plastics range from the chassis of a tractor to the handle of a shovel. In this area, chemical-resistant, durable materials with good surface quality and haptics are in demand.



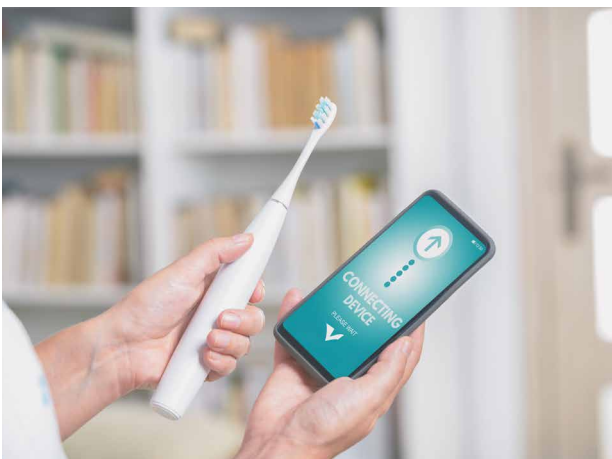
Sports and leisure

From tennis rackets and ski boots to e-bikes in the sports and leisure sector, plastic compounds are used that impress with their haptics, mechanics, lightness, stiffness or flexibility.



Industry

Nowadays, plastics can already replace other materials such as metals in many areas of machine or plant construction. Here they score points with their high abrasion resistance, chemical resistance, impact strength as well as their low weight and cost-effective processing.



Consumer goods

A coffee machine without plastics? Incredible! It is not for nothing that many types of plastics have been established in household appliance applications for years. They are resistant to chemicals and offer an excellent surface appearance, such as with electroplating ABS grades for perfect electroplating parts.

What can we do for you?

K.D. Feddersen is your global partner for comprehensive know-how in engineering plastics.

We speak your language and support you throughout the entire process.



We support you in the selection of plastics and know our way around:

- Specification sheets
- OEM specifications
- Approvals and regulations



Even if there are problems, we are there for you:

- Root cause analysis
- On-site assistance
- Complaints handling



Our application development always includes the latest trends and technologies for:

- Part design
- Mould concept
- Machine selection



We share our knowledge and train you on site or via webinar:

- Basics of plastics
- Basics of injection moulding
- Process optimisation



With our process optimisation we ensure:

- Efficiency enhancement
- Quality optimisation
- Decrease of rejects



With project-related marketing, we help you ensure that your projects get the attention they need:

- Press releases
- Professional articles
- Website and social media

Certified management systems

K.D. Feddersen GmbH & Co. KG is certified to the following standards:

- Information security management system
ISO / IEC 27001 : 2013
- Quality management system incl. IQNet
ISO 9001 : 2015
- Environmental management system
ISO 14001 : 2015
- Sustainability
REDcert²
- **ISCC PLUS**

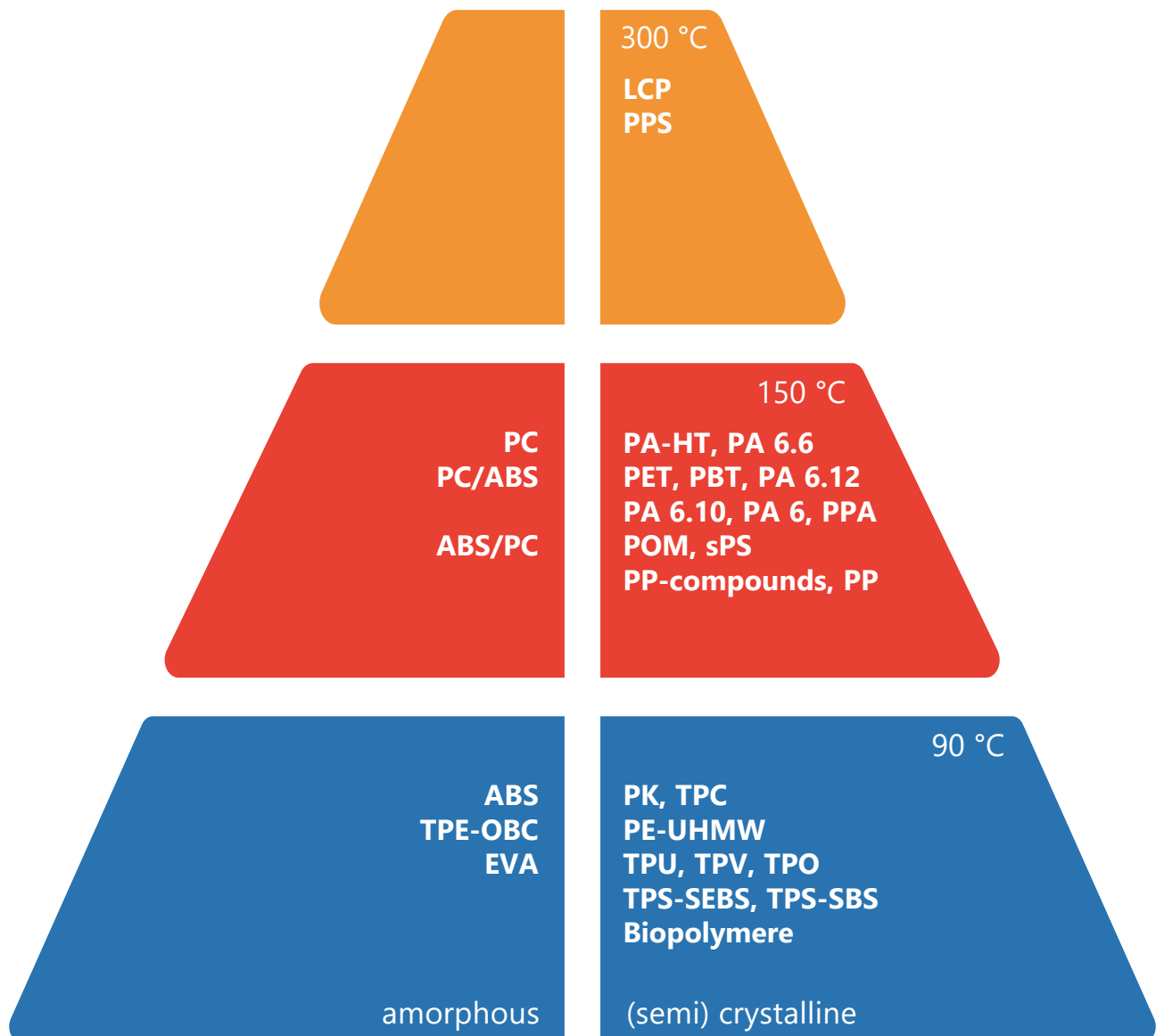
Plastics engineering product development

M.TEC ENGINEERING GmbH has been part of the Feddersen Group since 2018. The Aachen-based engineers develop technical products from idea to series maturity, primarily in the markets of automotive, medical technology, household appliances, electronic devices and building systems technology.

M.TEC supports you in every step of your plastics engineering: analysis and conception, development and design, calculation and simulation (mold flow analysis, FEM calculation), trial and test runs as well as industrialisation (tool technology) – an added value for your projects.

Our products

We offer you a large selection of engineering plastics for a wide range of applications. In the overview below you can see our product portfolio sorted by polymer types and RTI continuous service temperature. Our portfolio ranges from PP, ABS, thermoplastic elastomers, bioplastics and recyclates to high-performance plastics. Contact us!



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Post-consumer recycled plastics (rABS, rPS) 20



TEIJIN KASEI EUROPE B.V.

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Extrusion Blow Moulding Machinery Suitable for:

- Consumer packaging applications 23
- Industrial packaging applications 23
- Automotive applications 23

Products and partners



HOSTAFORM® , HOSTAFORM® ECO-B, CELCON® (POM copolymers for increased requirements)



Properties

- Extremely tough (up to -40 °C)
- Extremely hard and stiff
- High heat distortion temperature (service temperatures up to +100 °C)
- Excellent spring characteristics
- Favourable electric and dielectric behaviour
- Very good coefficient of friction
- Low tendency for environmental stress cracking
- Good chemical resistance to e.g. fuels, solvents and strong alkalis
- Low water absorption
- Easily processed
- Low CO₂ footprint, which can be declared for Hostaform ECO-B

Features

- Standard grades
- Easy-flowing grades
- High-strength grades
- Glass fibre reinforced and glass bead reinforced grades
- Grades with improved coefficient of friction
- Impact-strength-modified grades (S grades)
- Emission-optimised grades (XAP grades)
- Grades for use in the food industry or drinking water applications
- Grades with superior resistance to corrosive media such as highly active detergents or chlorinated water
- Hot-diesel-fuel-resistant grades (XF grades)
- Available in a wide variety of colors
- Special colors for laser marking
- UV-stabilised grades
- Electrically conductive grades (EC grades)
- Biobased grades
- Medical grades (MT grades)

AMCEL® (POM copolymers for increased standard requirements)

Properties

- Extremely tough (up to -40 °C)
- Extremely hard and stiff
- High heat distortion temperature (service temperatures up to +100 °C)
- Good sliding behaviour
- Easily processed

Features

- Natural or black colored
- 3 different flowabilities
- Food approval grades

POM MFI 9 (POM copolymers for standard requirements)

Properties

- Extremely tough (up to -40 °C)
- Extremely hard and stiff
- High heat distortion temperature (service temperatures up to +100 °C)
- Easily processed

Features

- Natural
- Medium viscosity

FORTRON® (PPS)

Properties

- Linear PPS
- Service temperatures up to +240 °C
- Suitable for lead-free soldering
- Inherently flame-retardant (UL 94 V0, some grades with 5 VA)
- Very good resistance to chemicals and oxidation
- Extreme stiffness and strength
- Minimal water absorption
- Very little creep, even at elevated temperatures

Features

- Non-reinforced grades (powder and pellets)
- Glass fibre reinforced grades (pellets)
- Glass fibre/mineral reinforced grades (pellets)
- Grades for food and drinking water applications
- Blow moulding grades
- Film and fibre grades
- Flexible PPS
- Medical grades (MT grades)

VECTRA® (LCP)

Properties

- Service temperatures up to +240 °C, short-term up to +340 °C
- Very low melt viscosity
- Extremely close tolerances possible (up to tolerance class T6)
- Very low heat of fusion (extremely short cycle times possible)
- Flash-free injection moulding
- Very high tensile strength (to 200 MPa) and modulus of elasticity (to 30,000 MPa)
- High impact strength
- Very small linear coefficient of thermal expansion, comparable to that of steel and ceramic
- Inherently flame-retardant (UL 94 V0, some grades with 5 VA)
- Very good resistance to chemicals and oxidation
- Minimal water absorption

Features

- Glass fibre reinforced grades
- Carbon fibre reinforced grades
- Fibre/filler modified grades
- Mineral and graphite filled grades
- Electroplating and conductive grades
- Extrusion grades
- Medical grades (MT grades)

ZENITE® (LCP)

Properties

- Service temperatures up to +240 °C, short-term up to +340 °C
- Very low melt viscosity
- Extremely close tolerances possible (up to tolerance class T6)
- Very low heat of fusion (extremely short cycle times possible)
- Flash-free injection moulding
- Very high tensile strength (to 200 MPa) and modulus of elasticity (to 30,000 MPa)
- High impact strength
- Very small linear coefficient of thermal expansion, comparable to that of steel and ceramic
- Inherently flame-retardant (UL 94 V0, some grades with 5 VA)
- Very good resistance to chemicals and oxidation
- Minimal water absorption

Features

- Glass fibre reinforced grades
- Carbon fibre reinforced grades
- Fibre/filler modified grades
- Mineral and graphite filled grades
- Electroplating and conductive grades
- Extrusion grades

CELANEX® (PBT)

Properties

- Extremely hard and stiff
- Good creep behaviour
- High heat distortion temperatures, particularly in glass fibre reinforced grades (service temperatures to +140 °C)
- Favourable coefficient of friction and wear performance
- High dimensional stability (small coefficient of thermal expansion, low water absorption)
- Good electrical characteristics
- Good chemical resistance
- No environmental stress cracking
- Good weathering resistance
- Rapid crystallisation resulting in optimised cycle times
- Paintable
- Flame-retardant (UL 94 V0, some grades with 5 VA) with proper surface treatment

Features

- Standard grades
- Glass fibre reinforced grades
- Glass bead reinforced grades
- Glass fibre reinforced grades with high-gloss surface
- Glass fibre/mineral reinforced grades
- UV-stabilised grades
- Standard and halogen-free grades with flame-retardant surface treatment (XFR types) listed UL 94 V0, partial 5 VA
- Special colors for laser marking
- MetalX metallic effect
- Recycled grades
- Biobased grades
- Medical grades (MT grades)

Products and partners



PIBITER® (PBT)

Properties

- Extremely hard and stiff
- Good chemical resistance
- High dimensional stability
- Good electrical properties
- Excellent performance at high temperatures

Features

- Flame-retardant grades (UL 94 V0)
- Elastomer modified grades (PIBITER® HI)

THERMX® (PCT)

Properties

- High-temperature-resistant polyester (based on polycyclohexylene dimethylene terephthalate chemistry)
- Chemical resistance to auto fluids
- Excellent temperature resistance
- Hydrolysis resistance better than PET and PBT
- Negligible moisture effect
- Dimensional stability
- Melting temperature +290 °C
- Same shrinkage as PBT
- Excellent colorability
- USCAR classification (class IV)
- Suitable for lead-free soldering

Features

- Glass fibre reinforced and/or mineral filled grades
- Flame-retardant grades

VANDAR® (PBT-HI)

Properties

- High impact strength and notched impact strength, even at low temperatures
- High heat distortion temperatures, especially in glass fibre reinforced grades (service temperatures up to +120 °C)
- Highly resistant to organic solvents, fuels and lubricants
- Highly wear-resistant
- Easily processed
- Paintable

Features

- Standard grades
- Glass fibre reinforced grades
- Grades with flame-retardant surface treatment

IMPET® (PET)

Properties

- Exceeding stiffness and strength
- Good creep behaviour
- Paintable surface
- High heat distortion temperatures (HDT/A up to +228 °C)
- Service temperature up to +150 °C
- Favourable coefficient of friction
- Very good electric/dielectric properties
- High chemical resistance and weathering stability

Features

- Glass fibre reinforced grades
- Custom color matching
- Recycled grades

CELSTRAN® LFRT (long fibre reinforced thermoplastics)

Properties

- Long fibre reinforcement creates a fibre skeleton in the component which easily meets crash-test requirements
- Impact strength at least twice as high and notched impact strength two to three times higher than for short fibre compounds
- Mechanical values remain constant over a wide temperature range
- High heat distortion temperature
- Low creep, low warpage and shrinkage
- Standard fibre length: 10 mm

Features

- Matrix materials: PP, PA, TPU, ABS, PPS, POM, PEEK, PBT (further matrix materials on request)
- Glass fibre reinforced grades: fibre content 20–60 %
- Carbon(C) fibre reinforced grades
- Aramide fibre reinforced grades
- Stainless steel fibre reinforced grades for electrical shielding

GUR® (PE-UHMW)

Properties

- Polyethylene, ultra-high molecular weight
- Exceptionally high notched impact strength
- High energy absorption at high stress rate
- Excellent slip properties and very low wear
- Very high chemical resistance to acids and alkalies
- Highly resistant to environmental stress cracking
- Very good noise- damping properties
- Can be used in a variety of applications due to wide service temperature range, -200 °C to +90 °C

Features

- Standard grades
- Modified grades and special purpose formulations for pressureless sintering and compression moulding
- Heat conductive grade
- Grades with additives (such as micro-powder)
- Biobased grades

COOLPOLY® (thermally conductive compounds)

Properties

- Thermal conductivity from 1 to 40 W/m K
- Efficient heat dissipation and cooling
- Avoidance of heat accumulation
- Extends the service life of parts and components
- UL listed with UL 94 V0 (product-dependent)

Features

- PA 6, PPS, LCP, TPE
- Thermally conductive and electrically insulating grades (1–10 W/m K)
- Thermally and electrically conductive grades (2–40 W/m K)

FRIANYL® (PA 6, PA 6.6, PPA flame-retardant compounds)

Properties

- Flame-retardant PA 6, PA 6.6 or PPA, halogen- and phosphorus-free, or with red phosphorus, or with halogens
- More than 80 grades are UL-listed or certified by VDE
- Offered in a wide range of colors (product-dependent)
- Extremely good impact strength
- High chemical-resistance
- Exceedingly strong and stiff

Features

- Non-reinforced flame-retardant grades (UL 94 V0 listed)
- Mineral reinforced flame-retardant grades (UL 94 V0 listed)
- Glass fibre reinforced flame-retardant grades (UL 94 V0 listed)
- Customised color settings

Products and partners



CELANYL® (PA 6, PA 6.6, PPA)

Properties

- Easy to process
- Extremely good impact strength
- High chemical-resistance
- Exceedingly strong and stiff
- Dimensional accuracy
- Minimal creep
- Good mechanical properties
- Excellent resistance to organic solvents
- High wear resistance and fatigue strength
- Good processability and flowability

Features

- Non-reinforced grades
- Glass fibre reinforced grades up to 60 %
- Mineral reinforced grades
- Glass bead reinforced grades
- Carbon fibre reinforced grades
- Metal reinforced grades (e.g. copper)
- Tribological grades (e.g. PTFE, molybdenum disulphide)
- Customised color settings
- Flame-retardant grades
- Electrically conductive grades
- Elastomer modified grades

ECOMID® (recycled PA 6, PA 6.6 compounds)



Properties

- Recycled post industrial PA 6, PA 6.6 compounds containing high-quality polyamide fibres and textiles
- High and consistent quality
- Sustainability
- Good impact strength
- Very good strength and stiffness
- UL listed with UL 94 HB (product-dependent)
- Very good processability
- High resistance to organic solvents
- Good resistance to wear and fatigue at high temperatures
- Good mechanical properties
- Compliant with RoHS norms

Features

- Non-reinforced grades
- Glass fibre reinforced grades
- Impact-modified grades
- Heat-stabilised grades
- Mineral-filled grades

POLIFOR® (PP)

Properties

- High stiffness and abrasion resistance
- Excellent chemical resistance
- Low moisture absorption

Features

- Non-reinforced and reinforced polypropylene compounds
- Flame-retardant grades

TECNOPRENE® (PP/GF)

Properties

- High stiffness and mechanical strength
- High tensile strength
- Increased heat resistance

Features

- Glass fibre reinforced grades
- Glass fibre/mineral reinforced grades
- Elastomer modified grades
- Grades for contact with food

TALCOPRENE (PP/TALC)

Properties

- Good dimensional stability
- Good mechanical properties

Features

- Talcum reinforced grades

CARBOPRENE (PP/CA)

Properties

- Good shape retention
- Favourable mechanical properties

Features

- Calcium carbonate reinforced grades

LAPRENE® (TPS-SEBS)

Properties

- Styrene-ethylene-butylene-styrene basis
- Service temperature from -50 °C to +120 °C
- Excellent UV, ozone and weather resistance
- Excellent resistance to bases, alcohols and acids
- High resilience within a large temperature range
- Recyclable

Features

- Hardness ratings from 2 Shore A to 60 Shore D
- Injection moulding grades
- Extrusion grades
- Transparent and translucent grades

SOPRENE® (TPS-SBS)

Properties

- Block copolymer styrene-butadiene-styrene
- Service temperature from -50 °C to +60 °C
- Excellent resistance to various chemical substances, such as bases, acids, alcohols, detergents and aqueous solutions
- Good abrasion resistance
- High resilience within a large temperature range
- Recyclable

Features

- Hardness ratings from 25 Shore A to 40 Shore D
- Injection moulding grades
- Extrusion grades, from 40 Shore D
- Transparent grades

FORFLEX® (TPO)

Properties

- Thermoplastic polyolefin
- Outstanding elastic properties at low temperatures
- Good weather resistance
- Low density, from 0.89 g/cm³
- Recyclable

Features

- Hardness ratings from 65 Shore A to 60 Shore D
- Injection moulding grades
- Extrusion grades
- Grades with food safety approval

ATEVA® G (EVA)

Properties

- Ethylene vinyl acetate
- Biocompatible (USP CL VI; ISO 10993)
- Approved for pharmaceutical and food applications
- Optically transparent
- Offers design flexibility
- Good tear and impact resistance
- Processes at low temperatures

Features

- 9 % vinyl acetate
- 18 % vinyl acetate (antioxidant)
- 28 % vinyl acetate (antioxidant/light flow)
- AT LDPE (high melt strength)
- Biobased grades

Products and partners



Vydyne® (PA 6.6)

Properties

- High strength and stiffness
- High thermal resistance
- Very good impact strength
- Low creep tendency
- Good chemical resistance
- High surface quality
- Easy to process
- Good colorability
- Good tribological properties

Features

- Non-reinforced
- Impact-modified grades
- Heat-stabilised grades
- Hydrolysis-stabilised grades
- Grades with very good long-term ageing resistance
- Glass fibre reinforced up to 50 %
- Glass bead reinforced up to 50 %
- Carbon fibre reinforced up to 40 %
- UV-stabilised and weather-resistant grades
- Flame-retardant grades (UL 94 V0-listed and with high RTI and GWIT)
- Grades for extrusion (also with food approval)

Vydyne® (PA 6) | POLIMID (PA 6)

Properties

- Easy to process
- High strength and stiffness
- Very good impact strength
- Low creep tendency
- Good colorability
- Excellent surface finish

Features

- Impact-modified grades
- Glass fibre reinforced grades up to 60 %
- Glass bead reinforced grades up to 50 %
- Carbon fibre reinforced grades up to 40 %
- UV-stabilised and weather-resistant grades
- Customised color settings

HiDura® (PA 6.10, PA 6.12, PA-HT)



Properties

- Very good chemical resistance
- Hydrolysis resistance
- High low-temperature impact strength
- Good tribological properties
- Very good barrier properties
- Very good weathering resistance
- Dimensional stability
- Ductile
- High heat stability

Features

- Non-reinforced
- Glass fibre reinforced grades up to 30 %
- Impact-modified grades

Starflam® (PA 6, PA 6.6, PA 6.6/PA 6)

Properties

- High strength and stiffness
- Very good impact strength
- Very good chemical resistance
- Heat stabilised
- Low corrosion
- Very good insulation properties
- Very good flowability
- Halogen-free and free of red phosphorus

Features

- Flame-retardant grades
- Non-reinforced and reinforced grades
PA 6, PA 6.6, PA 6.6/PA 6 Blends
- UL 94 listed (up to 5VA)
- Glass fibre reinforced grades up to 45 %
- Mineral reinforced grades up to 40 %
- Electrically neutral grades
- Radiation cross-linkable grades
- Customised color settings

ELIX® (ABS, ABS/PC)

Properties

- Emulsion ABS
- Opaque
- High gloss
- High impact strength and notched impact strength
- High stiffness
- Good flowability
- Heat deflection temperature up to +113 °C to Vicat B50
- Excellent dimensional stability
- Excellent paintability

Features

- Automotive grades
- UV-stabilised grades
- Emission-reduced grades
- Types with stick-slip effect (anti squeak)
- Electroplating grades
- Antistatic grades
- Colored versions according to RAL, OEM colors etc.
- Colored versions with less gloss
- White colored grades with high light reflection and light blocking
- Grades with food approval for food contact applications, toys and cosmetics containers

ELIX® (PC/ABS)

Properties

- High flow
- High heat distortion temperature
- Very high impact, also at -40 °C
- UV-stabilised
- Low emission
- Excellent processability and paintability

Features

- Injection moulding grades with Vicat B120 for +120 °C and +130 °C
- Standard black
- Colored versions according to RAL, OEM colors etc.

E-LOOP (mechanical recycled ABS/PC)



Properties

- Recycled material used in the formulation
- Reduced carbon footprint
- Equivalent properties to prime version ELIX® H801
- High heat resistance
- Good flowability

Features

- Injection moulding grade with Vicat B50 for +105 °C
- Automotive grade
- Non-reinforced grade
- Low emission grade
- Standard black



TRINSEO™

MEGOL™ (TPS-SEBS)

Properties

- Styrene/ethylene-butylene/styrene block copolymer
- Service temperature from -50 °C to +120 °C
- Excellent soft-touch properties
- Good compression set
- Excellent long-term stability (against UV, ozone and weathering)

Features

- Hardness ratings from 5 Shore A to 60 Shore D
- Injection moulding grades
- Extrusion grades
- > 300 active colors and custom color settings
- A wide variety of modified product ranges available, such as: **MEGOL™ HT, MEGOL™ SV, MEGOL™** grades

RAPLAN™ (TPS-SBS)

Properties

- Styrene/butadiene block copolymer
- Service temperature from -50 °C to +60 °C
- Very good low-temperature flexibility
- Good resistance to acids and alkalis
- High abrasion and slip resistance
- Halogen-free, sterilisable and resistant against a wide range of cleaning agents

Features

- Hardness ratings from 20 Shore A to 50 Shore D
- Injection moulding grades
- Extrusion grades
- Food approval grades available (EU 10/2011, FDA)
- Wide range of different viscosities available
- Suitable for the substitution of rigid PVC

Products and partners



APILON 52™ (TPU)

Properties

- Thermoplastic polyurethane elastomer
- Service temperature of TPU ester from -30 °C to +100 °C
- Service temperature of TPU ether from -50 °C to +90 °C
- Excellent wear and abrasion resistance
- Very good low-temperature flexibility
- High long-term stability
- High resistance to oils, greases, oxygen and ozone

Features

- Hardness ratings from 40 Shore A to 72 Shore D
- Injection moulding grades
- Extrusion grades
- Grades with increased transparency
- Haptic-optimised grades with a rubber-like and matt surface
- Adhesion-modified grades for a wide range of polymers (polar as well as non-polar) available

NEOGOL™ (OBC)

Properties

- Olefin block copolymer
- Service temperature from -50 °C to +80 °C
- Good tear resistance
- Chemical resistance to acids, alkalis, detergents and aqueous solutions
- Halogen-free
- As an alternative for TPE when no specific physical-mechanical properties are required

Features

- Hardness ratings from 20 Shore A to 60 Shore D
- Injection moulding grades
- Food approval grades available (EU 10/2011, FDA)
- Suitable for substitution of PVC

TIVILON™ (TPV)

Properties

- Dynamically vulcanised thermoplastic elastomer (TPV)
- Service temperature from -40 °C to +130 °C
- Very good mechanical properties
- Good compression set over a wide temperature range
- High resistance to UV and heat ageing
- Easier processing (compared to conventional TPVs)
- Very good colorability

Features

- Hardness ratings from 30 Shore A to 60 Shore D
- Injection moulding grades
- Extrusion grades

API L™ (TPC)

Properties

- Thermoplastic copolyester elastomer (TPC)
- Service temperature from -40 °C to +120 °C
- High fatigue strength, elasticity and stiffness, even at low temperatures
- Maintains properties even at high temperatures
- Good chemical resistance (also against oils and solvents)

Features

- Hardness ratings from 25 Shore A to 72 Shore D
- Injection moulding grades
- Extrusion grades
- Food approval grades available (EU 10/2011, FDA)

APINAT™ (biodegradable TPC)

Properties

- Certified according to OK compost INDUSTRIAL (EN 13432)"
- High biomass content and gentle on the environment
- Good low-temperature flexibility
- High thermostability
- Easy processing
- TPC based on renewable raw materials or fossil origin
- Can be colored with biodegradable color masterbatches

Features

- Hardness ratings from 60 Shore A to 78 Shore D
- Food approval grades available (EU 10/2011, FDA)
- Injection moulding grades
- Extrusion grades
- Blow moulding grades



APIGO™ (TPO)

Properties

- Thermoplastic polyolefin
- Service temperature from -50 °C to +90 °C
- Good tear resistance
- Very good low-temperature flexibility
- Good resistance to acids and alkalis
- Halogen-free

Features

- Hardness ratings from 20 Shore A to 60 Shore D
- Injection moulding grades
- Extrusion grades
- Custom formulations for airbag covers
- Food approval grades available (EU 10/2011, FDA)
- Suitable for the substitution of soft PVC

APICOLOR™ (color concentrates for TPE)

Properties

- Color concentrates for the self-coloring of thermoplastic elastomers

Features

- Broad spectrum based on polymers: PE, EVA, PVC, PS, TPU
- Individual color matching, according to RAL, PANTONE and NCS



POKETONE™ HYOSUNG POLYKETONE (PK)

Properties

- High impact strength
- Very good resilience
- High dimensional stability
- Very good resistance to wear
- Good tribological properties
- Very good hydrolysis resistance
- High chemical resistance
- Extraordinary barrier effect against fuel and oxygen
- Good flame retardancy

Features

- Non-reinforced grades
- Glass fibre reinforced grades
- Flame-retardant grades
- Tribological modified grades
- Grades for food and drinking water applications



Recompounds (ABS, PC/ABS, PC, POM, PPS, PP, PA 6, PA 6.6, PA 12, PBT)



Properties

- Produced with pre-sorted post-industrial plastics
- At a similar level to virgin compounds
- Consistent quality
- Products based on up to 95 % sustainable raw materials
- Low CO₂ footprint, which can be declared for recompounds

Features

- AUROran® (ABS)
- AUROblend® (PC+ABS)
- AUROlon® (PC)
- AUROmid® (PA 6, PA 6.6, PA 12)
- AUROcom® (PP)
- AUROform® (POM)
- AUROdur® (PBT)
- AUROtron® (PPS)

These recompounds are available from Aurora:

- Depending on product, unfilled and/or modified with filler system
- Generally black, natural or pre-colored on request
- Further products on request

Products and partners



Post-consumer recycled plastics (rABS, rPS)



Properties

- Made with post-consumer* plastics (D3E / VHU)
- Produced using a patented process (triboelectricity)
- Quality level comparable to new compounds
- Consistent quality from batch to batch
- Products from renewable raw materials
- 85 % lower CO₂ footprint compared to new compounds
- Compliant with RoHS norms

*Recycled plastics from household or industrial waste

Features

- Grades with food approval for food contact applications (Food contact US: FDA 21 CFR 177)
 - Available in black, grey and white
- Skylonitrile[®] (rABS):
- Izod impact strength (KJ/m², 23°, ISO 180): 10-12; 12-14; 14-16; 16-18
 - Products with MFI range (g/10 min., ISO 1133, 220°/10 kG.): 10-55
- Skystyrene[®] (rPS):
- Izod impact strength (KJ/m², 23°, ISO 180): 6-8; 8-10
 - Products with MFI range (g/10 min. ISO 1133, 220°/5 kG.): 5-7



Multilon[®] (PC/ABS)

Properties

- High impact strength, Charpy notched impact strength (+23 °C) 50-75 kJ/m²
- Excellent flow behaviour, MVR (+260 °C/5 kg) up to 28 cm³/10 min
- High heat deflection temperature up to 128 °C according to Vicat B50
- Excellent processability and paintability

Features

- Unfilled PC/ABS blends for automotive interior applications:
- High heat resistance, easy flowing
 - Medium heat resistance, easy flowing
 - Low density, low gloss
- Flame-retardant PC/ABS blends:
- V0, halogen-free grades

Panlite[®] (PC)

Properties

- High strength, stiffness and hardness
- Excellent impact strength
- High heat deflection temperature
- Good electrical properties
- High optical quality

Features

- Standard PC, colorless
- Standard PC, UV-stabilised, colorless
- Flame-retardant, UV-stabilised, black or dyed
- Glass fibre reinforced, flame-retardant, UV-stabilised, black or dyed
- Light-diffusing, white
- Flame-retardant, light-diffusing, UV-stabilised, white



Xarec[®] (sPS)

Properties

- Extremely hydrolytically stable
- Low warpage
- Low specific weight
- High dimensional stability
- Very good electrical characteristics
- High continuous service temperature

Features

- Glass fibre reinforced grades (up to 40 %)
- Flame-retardant grades with UL listing
- KTW-compliant grades (for use in hot-water and cold-water applications)
- FDA-compliant grades



TORELINA® (PPS)

Properties

- Excellent long-term heat resistance (UL temperature index: +200 °C to +240 °C, UL file No. E41797)
- Low mould shrinkage
- Low linear thermal expansion
- Low water absorption
- Excellent dimensional stability even when used under high-temperature, high-humidity conditions
- Excellent chemical resistance
- High strength
- High rigidity
- Low degradation characteristic even in high temperature conditions
- Excellent fatigue endurance and creep resistance
- Inherent self-extinguishing – passes UL 94 V-0 standard without adding flame-retardant
- Excellent electric characteristics in high-temperature, high-humidity and high-frequency conditions
- Good flow property

Features

- Cross-link grades
- Linear grades
- Various grades of products from base polymer to compounds

SIVERAS® (LCP)

Properties

- Excellent toughness in thin-walled mouldings, by higher molecular orientation
- Excellent thermal resistance (more than +250 °C)
- Excellent flowability
- Lower warpage in reflow soldering, due to lower-pressure moulding
- Excellent attenuate character and high modulus

Features

- Glass fibre reinforced grades
- Glass fibre and inorganic filler reinforced grades (GF and MD)
- High valued grades (specialised application)



M-VERA® A, B, BR, GP (biodegradable and/or biobased compounds)



Properties

- Processable on conventional plastics machinery
- Delivered ready-to-use
- Printable and weldable
- Can easily be colored with our AF-Eco® masterbatches

Features

- For various applications and processing technologies
- With different certificates of biodegradability
- With different amounts of renewables and/or biobased carbon content

AF-Eco® (biodegradable and/or biobased masterbatches)



Properties

- Color, carbon black and additive masterbatches available
- Color masterbatches certified in accordance with OK compost INDUSTRIAL (EN 13432)
- Excellent dispersion
- Free of heavy metals and phthalates

Features

- For a wide range of applications and processing technologies
- Our standard portfolio already includes numerous colors
- We also develop new color masterbatches – tailor-made for your application

Products and partners



AF-Color® (color masterbatches)

Properties

Custom masterbatches according to customer requirements.

In addition, the following effects are possible:

- Metallic effects
- Mother-of-pearl effects
- Iridescent effect
- Luminescence (fluorescence, phosphorescence)
- Thermochromism
- Photochromism

Features

Standard for coloring the following based on grade-compliance:

- PE, PP
- PA
- POM
- PBT, PET
- Styrene copolymers
- As well as other engineering polymers

AF-Carbon® (engineering carbon black masterbatches)

Properties

Engineering carbon black masterbatch based on different pigment types:

- Carbon black
- Lamp black
- Organic and inorganic black coloration
- Nigrosine
- NIR-reflecting preparations

Features

Standard for coloring the following based on grade-compliance:

- PE, PP
- PA
- POM
- PBT, PET
- Styrene copolymers
- As well as other engineering polymers

AF-Complex® (additive masterbatches)

Properties

Customised additive masterbatches according to customer requirements.

The following is a brief selection:

- UV stabilisers
- Static inhibitors
- Lubricants
- Laser additives
- Antioxidants/heat stabilisers
- Endothermic blowing agents
- Further additive combinations available on request

Features

Standard for coloring the following based on grade-compliance:

- PE, PP
- PA
- POM
- PBT, PET
- Styrene copolymers
- As well as other engineering polymers

AF-Clean® (purging compounds)

Properties

Purging compounds for all thermoplastics in injection moulding, extrusion and blow moulding.

Features

- AF-Clean® Basic for temperature range from +160 °C to +240 °C
- AF-Clean® HT for temperature range from +240 °C to +380 °C

FED-MTS line (twin-screw extruders)

With the **FED-MTS** models, the available torque and the conveying volumes of the screw elements are specially adapted to meet the requirements of compounding engineering plastics and masterbatches.

Features

- Unique screw geometry
- Gentle process technology
- Quick changeover of materials
- High flexibility, easy to re-configure
- High output rates at lower temperatures
- Patented die plate design
- Variable process lengths up to 42 L/D
- Minimising shear stress
- Unique side feeding and venting
- Highest quality products
- Able to provide full turnkey solutions

Markets (extrusion blow moulding machinery options)

Consumer Packaging

- KBB machines – all electric models: KBB 20, KBB40, KBB60, KBB80
- KLS machines – long stroke models: KLS6S-100, KLS6D-100, KLS8S-100, KLS8D-100, KLS10S-100, KLS10D-100, KLS12S-100, KLS12D-100, KLS14S-100, KLS14D-100
- KEB machines – single station models: KEB10, KEB20
- KCC machines – versatile models: KCC5S, KCC5D, KCC10S, KCC10D, KCC15S, KCC15D, KCC20S, KCC20D, KCC20D (900 mm), KCC20D (1150 mm)

Industrial Packaging

- KLS machines – long stroke flexible models: KLS30S, KLS30D, KLS60S, KLS60D
- KEB machines – single station model: KEB30
- KCC machines – versatile models: KCC20S, KCC20D, KCC20D (900 mm), KCC20D (1150 mm), KCC25S, KCC25D, KCC30
- KBS machines – all round flexibility, complexity, variety models: KBS20, KBS61, KBS120

Automotive

- KBS machines – all round flexibility, complexity, variety models: KBS20, KBS61, KBS120, KBS241
- KCC machines – versatile model: KCC30
- K3D machines – monolayer and co-ex 3D curved part models: K3D-HP, K3D-HPD, K3D-SP8

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