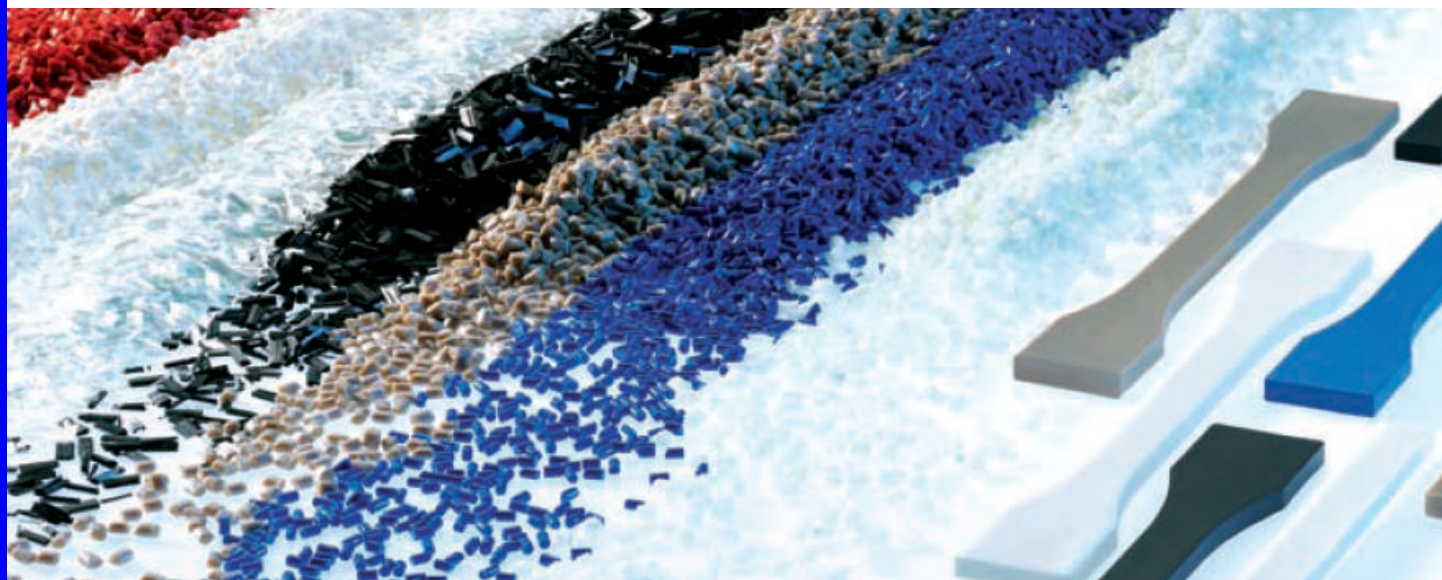


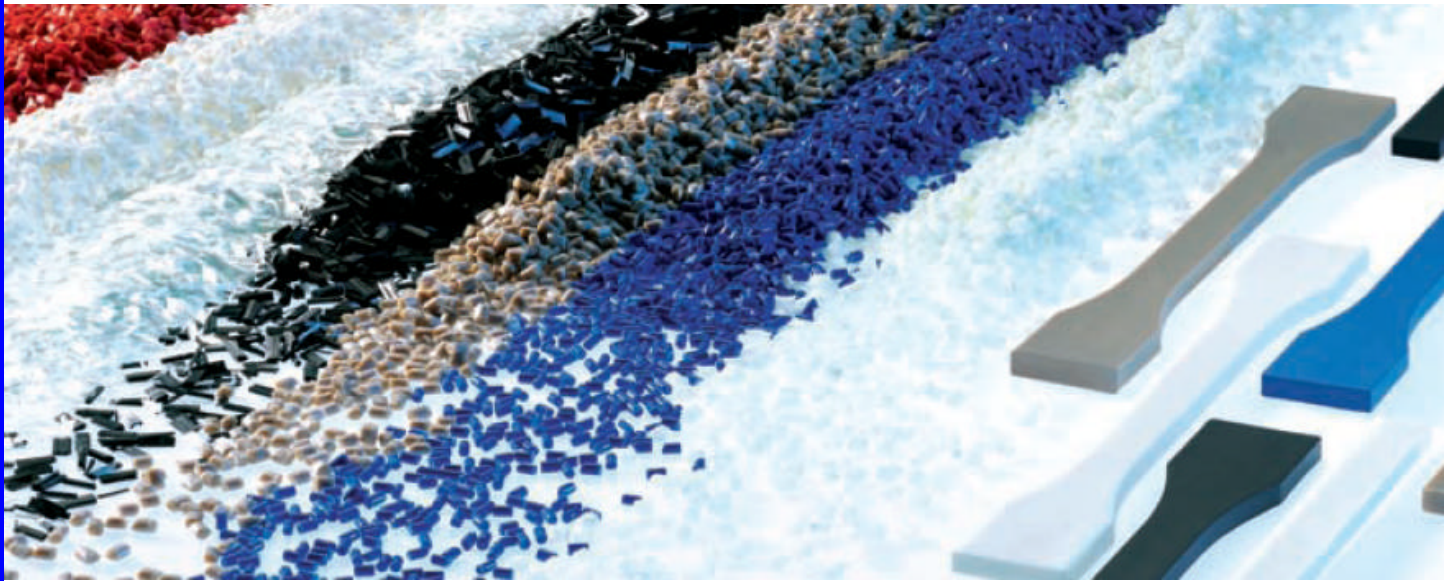
**Any mixture. Any quantity. Any time.**  
**High Performance-Compounds and special settings.**



## **TECACOMP® - Product range**

<b>TECACOMP® Materials</b>	<b>High-temperature polymers</b>  <b>PEEK, PEI, PEK, PES, PPS, PPSU, PSU, PVDF</b>	<b>Polyamides</b>  <b>PA 6, PA 66, PA 11, PA 12, PA 46, PA 610, PA 611, PA 612</b>	<b>Engineering plastics</b>  <b>POM, PBT, PET, PC, PPE/PS</b>
<b>TECACOMP® Standard formulations</b>	Here you will find selected high-temperature and engineering plastics in well tried standard formulations for applications in the field of tribology / mechanical engineering. Most of the materials are stock items and can thus be supplied in small and medium sized quantities at short notice.		
<b>TECACOMP® Special formulations</b>	TECACOMP® - special formulations include all conventional high-temperature and engineering plastics, as well as the current reinforcing materials, fillers and additives. Where the standard materials available in the market are not satisfactory, ENSINGER Compounds will customise materials to match these properties and meet your needs. Our material specialists have been familiar with materials and their characteristics for decades. Your special adaptations can therefore be realised and supplied in a short time.		
<b>TECACOMP® Specialities</b>	TECACOMP® - specialities are compounds with selected fillers to satisfy particular needs regarding tribology / mechanical engineering, electrical conductivity and medical technology applications. Other customer specific compounds can be developed and produced as part of special projects.		

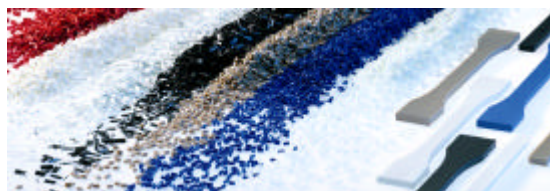
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- I Ensinger Compounds produces the following well tried standard formulations on a continuous basis
- I Tailor made materials – based on our standard formulations - can be produced easily (also) in small quantities  
For example: coloured materials, different filling degrees, additional attributes or simply other properties
- I We gladly take care of your individual projects and assist you with engineering and manufacturing expertise

**TECACOMP® Standard formulations:** PA6, PA66, PA46, POM, PBT, PC, PE, PP,  
PVDF, PSU, PES, PPSU, PPS, PEEK HT, PEEK

TECACOMP® PA6		different grades of viscosity
TECACOMP® PA6 GF15		PA6 glass fibre
TECACOMP® PA6 GF20		PA6 glass fibre
TECACOMP® PA6 GF30		PA6 glass fibre
TECACOMP® PA6 GF35		PA6 glass fibre
TECACOMP® PA6 GF40		PA6 glass fibre
TECACOMP® PA6 GF50		PA6 glass fibre
TECACOMP® PA6 GF15 sw		PA6 glass fibre, black
TECACOMP® PA6 GF30 sw		PA6 glass fibre, black
TECACOMP® PA6 GF50 sw		PA6 glass fibre, black
TECACOMP® PA6 GF15 coloured		PA6 glass fibre, coloured
TECACOMP® PA6 GF25 LA		PA6 glass fibre, with lubricant
TECACOMP® PA6 GF35 HI		PA6 glass fibre, heat stabilized
TECACOMP® PA6 GK15		PA6 glass beads
TECACOMP® PA6 GK20		PA6 glass beads
TECACOMP® PA6 GK30		PA6 glass beads
TECACOMP® PA6 GK10 TF10		PA6 glass beads, PTFE
TECACOMP® PA6 GK20 TF10		PA6 glass beads, PTFE
TECACOMP® PA6 CF20 sw		PA6 carbon fibre
TECACOMP® PA6 CF30 sw		PA6 carbon fibre
TECACOMP® PA6 MO		PA6 molybdendisulfid
TECACOMP® PA6 coloured		PA6 coloured



**Any mixture. Any quantity. Any time.**  
**High Performance-Compounds and special settings.**

<b>TECACOMP® PA66</b>		<b>different grades of viscosity</b>
TECACOMP® PA66 GF15	PA66 glass fibre	
TECACOMP® PA66 GF25	PA66 glass fibre	
TECACOMP® PA66 GF30	PA66 glass fibre	
TECACOMP® PA66 GF35	PA66 glass fibre	
TECACOMP® PA66 GF40	PA66 glass fibre	
TECACOMP® PA66 GF50	PA66 glass fibre	
TECACOMP® PA66 GF15 sw	PA66 glass fibre, black	
TECACOMP® PA66 GF30 sw	PA66 glass fibre, black	
TECACOMP® PA66 GF35 sw	PA66 glass fibre, black	
TECACOMP® PA66 GF50 sw	PA66 glass fibre, black	
TECACOMP® PA66 GF25 HI	PA66 glass fibre, heat stabilized	
TECACOMP® PA66 GF30 HI	PA66 glass fibre, heat stabilized	
TECACOMP® PA66 GF35 HI	PA66 glass fibre, heat stabilized	
TECACOMP® PA66 GF25 HI sw	PA66 glass fibre, heat stabilized, black	
TECACOMP® PA66 GF35 HI sw	PA66 glass fibre, heat stabilized, black	
TECACOMP® PA66 GF25 TF10 HI	PA66 glass fibre, PTFE, heat stabilized	
TECACOMP® PA66 GF30 TF15	PA66 glass fibre, PTFE	
TECACOMP® PA66 GF30 TF15 HI	PA66 glass fibre, PTFE, heat stabilized	
TECACOMP® PA66 GF30 TF15 HI sw	PA66 glass fibre, PTFE, heat stabilized, black	
TECACOMP® PA66 GF35 CF10 HI	PA66 glass fibre, carbon fibre, heat stabilized	
TECACOMP® PA66 GF15 GK8	PA66 glass fibre, glass beads	
TECACOMP® PA66 GK30 sw	PA66 glass beads, black	
TECACOMP® PA66 GK30 TF15 sw	PA66 glass beads, PTFE, black	
TECACOMP® PA66 CF20	PA66 carbon fibre	
TECACOMP® PA66 CF30	PA66 carbon fibre	
TECACOMP® PA66 CF35	PA66 carbon fibre	
TECACOMP® PA66 CF10 HI	PA66 carbon fibre, heat stabilized	
TECACOMP® PA66 CF20 HI	PA66 carbon fibre, heat stabilized	
TECACOMP® PA66 CF10 TF20	PA66 carbon fibre, PTFE	
TECACOMP® PA66 CF20 TF15	PA66 carbon fibre, PTFE	
TECACOMP® PA66 HI	PA66 heat stabilized	
TECACOMP® PA66 LA	PA66 polyethylen, with lubricant	
TECACOMP® PA66 SF20 coloured	PA66 aramid fibre, coloured	
TECACOMP® PA66 PVX	PA66 carbon fibre, PTFE	

<b>TECACOMP® PA46</b>	
TECACOMP® PA46 CF15 TF10	PA46 carbon fibre, PTFE





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**High Performance-Compounds and special settings.**

<b>TECACOMP® POM H / POM C</b>	
TECACOMP® POM AH sw	POM black
TECACOMP® POM AH white	POM white
TECACOMP® POM AH coloured	POM coloured
TECACOMP® POM AH GF30	POM glass fibre
TECACOMP® POM AH MT sw	POM medical grade, black
TECACOMP® POM AH MT coloured	POM medical grade, coloured
TECACOMP® POM AH LA	POM polyethylen, Tribo-Type
TECACOMP® POM AH SAN	POM antimicrobial
TECACOMP® POM AD UV coloured	POM uv-stabilized, coloured

<b>TECACOMP® PBT</b>	
TECACOMP® PBT GF30	PBT glass fibre
TECACOMP® PBT GF30 AM	PBT glass fibre, antimicrobial
TECACOMP® PBT PVX	PBT carbon fibre, PTFE
TECACOMP® PBT AM white	PBT antimicrobial, white
TECACOMP® PBT TF10	PBT PTFE

<b>TECACOMP® PC</b>	
TECACOMP® PC GF20	PC glass fibre
TECACOMP® PC GF30	PC glass fibre
TECACOMP® PC CF15	PC carbon fibre
TECACOMP® PC CF20	PC carbon fibre
TECACOMP® PC CF15 sw	PC carbon fibre, black
TECACOMP® PC CF20 sw	PC carbon fibre, black
TECACOMP® PC CF15 coloured	PC carbon fibre, coloured
TECACOMP® PC sw	PC black

<b>TECACOMP® PE / PP</b>	
TECACOMP® PE AM	PE antimicrobial
TECACOMP® PP GF30	PP glass fibre
TECACOMP® PP CF15	PP carbon fibre
TECACOMP® PP CF15 sw	PP carbon fibre, black
TECACOMP® PP TV30	PP talkum



**Any mixture. Any quantity. Any time.**  
**High Performance-Compounds and special settings.**

<b>TECACOMP® PVDF</b>	
TECACOMP® PVDF MT sw	PVDF medical grade, black
TECACOMP® PVDF MT coloured	PVDF medical grade, coloured
TECACOMP® PVDF ELS	PVDF carbon fibre

<b>TECACOMP® PSU / PES / PPSU</b>	
TECACOMP® PES GF5	Polyethersulfon, glass fibre
TECACOMP® PPSU sw	Polyphenylsulfon, black
TECACOMP® PPSU TF15	Polyphenylsulfon, PTFE

<b>TECACOMP® PPS</b>	
TECACOMP® PPS GF40	PPS glass fibre
TECACOMP® PPS GF35 sw	PPS glass fibre, black
TECACOMP® PPS GF10 TF10	PPS glass fibre, PTFE
TECACOMP® PPS GF10 TF15	PPS glass fibre, PTFE
TECACOMP® PPS GF30 TF15	PPS glass fibre, PTFE
TECACOMP® PPS GF40 TF10	PPS glass fibre, PTFE
TECACOMP® PPS GK40 TiO2	PPS glass beads, titandioxyd
TECACOMP® PPS CF30	PPS carbon fibre
TECACOMP® PPS CF40	PPS carbon fibre
TECACOMP® PPS MT	PPS medical technology
TECACOMP® PPS PVX	PPS glass fibre, PTFE, graphite
TECACOMP® PPS TF30 PI	PPS PTFE, polyimid

<b>TECACOMP® PEEK HT</b>	
TECACOMP® PEEK HT GF20	PEEK HT, glass fibre
TECACOMP® PEEK HT GF30	PEEK HT, glass fibre
TECACOMP® PEEK HT CF30	PEEK HT, carbon fibre



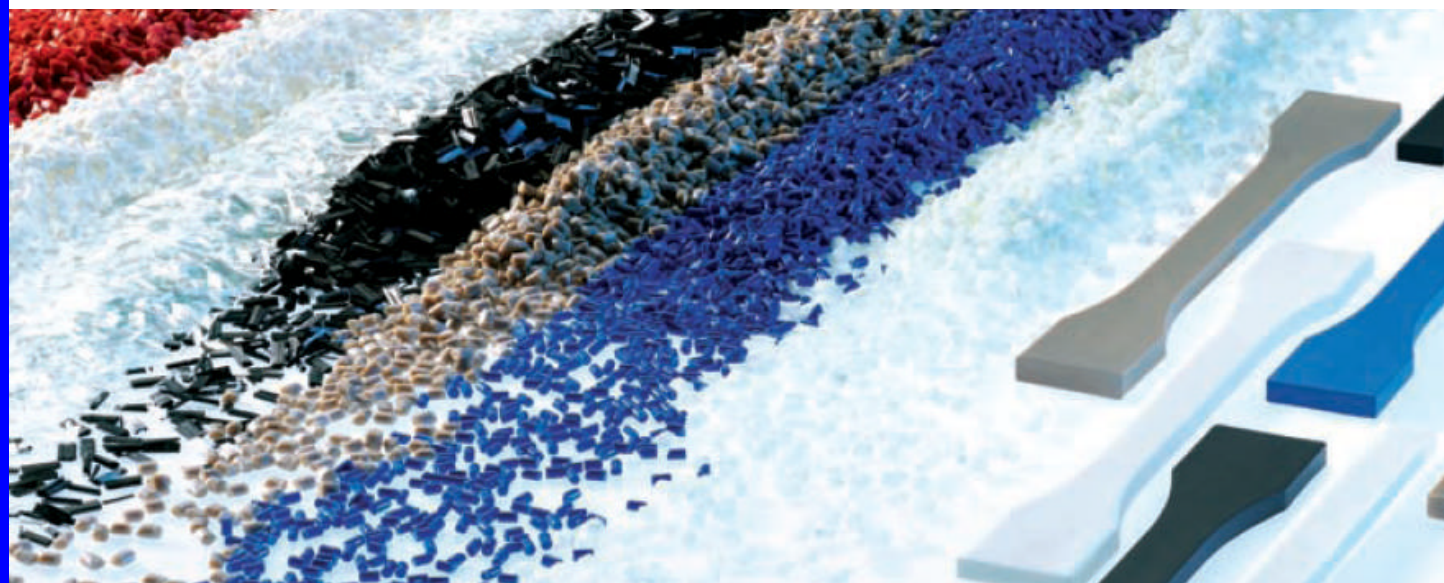
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**High Performance-Compounds and special settings.**

TECACOMP® PEEK	
TECACOMP® PEEK coloured	PEEK coloured
TECACOMP® PEEK GF30	PEEK glass fibre
TECACOMP® PEEK GF30 sw	PEEK glass fibre
TECACOMP® PEEK GF15 TF15	PEEK glass fibre, PTFE
TECACOMP® PEEK CF20	PEEK carbon fibre
TECACOMP® PEEK CF30	PEEK carbon fibre
TECACOMP® PEEK CF50	PEEK carbon fibre
TECACOMP® PEEK CF5 TF10	PEEK carbon fibre, PTFE
TECACOMP® PEEK CF10 TF10	PEEK carbon fibre, PTFE
TECACOMP® PEEK CF15 TF10	PEEK carbon fibre, PTFE
TECACOMP® PEEK CF15 TF15	PEEK carbon fibre, PTFE
TECACOMP® PEEK CF30 X10	PEEK carbon fibre, mineral
TECACOMP® PEEK MT	PEEK medical technology
TECACOMP® PEEK MT AM	PEEK medical technology, antimicrobial
TECACOMP® PEEK MT AM sw	PEEK medical technology, antimicrobial, black
TECACOMP® PEEK MT AM coloured	PEEK medical technology, antimicrobial, coloured
TECACOMP® PEEK MT blue	PEEK medical technology, coloured
TECACOMP® PEEK MT yellow	PEEK medical technology, coloured
TECACOMP® PEEK MT green	PEEK medical technology, coloured
TECACOMP® PEEK MT red	PEEK medical technology, coloured
TECACOMP® PEEK MT sw	PEEK medical technology, coloured
TECACOMP® PEEK MT TF20	PEEK medical technology, PTFE
TECACOMP® PEEK X black	PEEK optimized tribological properties
TECACOMP® PEEK X blue	PEEK optimized tribological properties
TECACOMP® PEEK X grey	PEEK optimized tribological properties
TECACOMP® PEEK X red	PEEK optimized tribological properties
TECACOMP® PEEK PVX	PEEK with lubricant, graphit, carbon fibre, PTFE
TECACOMP® PEEK TF10	PEEK PTFE
TECACOMP® PEEK TF20	PEEK PTFE
TECACOMP® PEEK GR15 TF15	PEEK graphit, PTFE
TECACOMP® PEEK MO15 TF15	PEEK molybdendisulfid, PTFE
TECACOMP® PEEK ELS	PEEK carbon fibre
TECACOMP® PEEK ELS Nano	PEEK carbo nano tubes

**I Applications:** Tribology / mechanic, optimized tribological properties, medical technology, electrical conductivity, Carbo-Nano-Tubes.

**I Industries:** Automotive industry, medical technology, food industry, machine and apparatus building, electrical engineering, semiconductor industry, aerospace industry.

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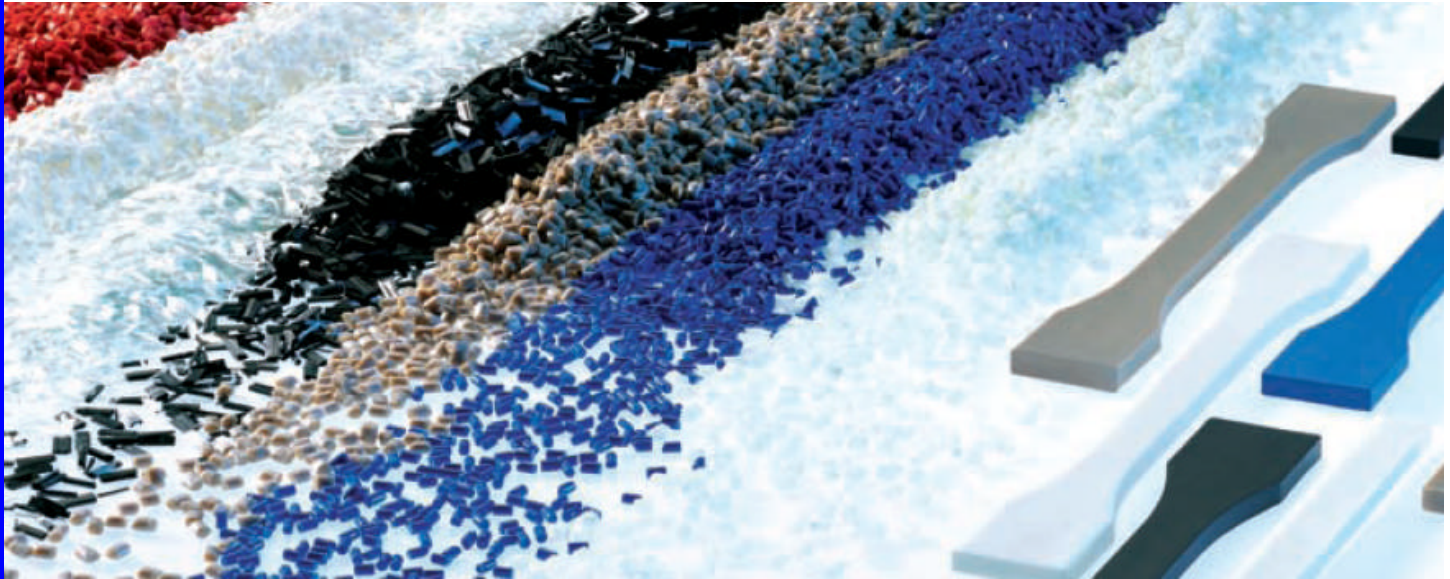
## TECACOMP® - Special formulations

	Material	Name	tribology / mechanical engineering					conductivity		medical devices	
			glass fibre	glass beads	mineral	friction reducing fillers	carbon fibre	conductive carbon black	carbon nano tubes	colour	anti-microbial
Styrene Polymers	ABS	TECACOMP® ABS	+	+	+	+	+	+	+	+	+
	ASA/SAN	TECACOMP® ASA/SAN	+	+	+	+	+	+	+	+	+
	PS	TECACOMP® PS	+	+	+	+	+	+	+	+	+
Polyamides	PA 11	TECACOMP® PA 11	+	+	+	+	+	+	+	+	+
	PA 12	TECACOMP® PA 12	+	+	+	+	+	+	+	+	+
	PA 46	TECACOMP® PA 46	+	+	+	+	+	+	+	+	+
	PA 6	TECACOMP® PA 6	+	+	+	+	+	+	+	+	+
	PA 610	TECACOMP® PA 610	+	+	+	+	+	+	+	+	+
	PA 611	TECACOMP® PA 611	+	+	+	+	+	+	+	+	+
	PA 612	TECACOMP® PA 612	+	+	+	+	+	+	+	+	+
	PA 66	TECACOMP® PA 66	+	+	+	+	+	+	+	+	+
Construction plastics	PBT	TECACOMP® PBT	+	+	+	+	+	+	+	+	+
	PC	TECACOMP® PC	+	+	+	+	+	+	+	+	+
	PET	TECACOMP® PET	+	+	+	+	+	+	+	+	+
	POM	TECACOMP® POM AD/AH	+	+	+	+	+	+	+	+	+
	PPE/PS	TECACOMP® PPE	+	+	+	+	+	+	+	+	+
High-temperature polymers	PEEK	TECACOMP® PEEK	+	+	+	+	+	+	+	+	+
	PEI	TECACOMP® PEI	+	+	+	+	+	+	+	+	+
	PEK	TECACOMP® PEEK HT	+	+	+	+	+	+	+	+	+
	PES	TECACOMP® PES	+	+	+	+	+	+	+	+	+
	PPS	TECACOMP® PPS	+	+	+	+	+	+	+	+	+
	PPSU	TECACOMP® PPSU	+	+	+	+	+	+	+	+	+
	PSU	TECACOMP® PSU	+	+	+	+	+	+	+	+	+
	PVDF	TECACOMP® PVDF	+	+	+	+	+	+	+	+	+

Also available: flame retarded, uv – stabilized, heat stabilized, high filling degree available with metal powder or other additives.  
+ = Different settings on customer request are possible



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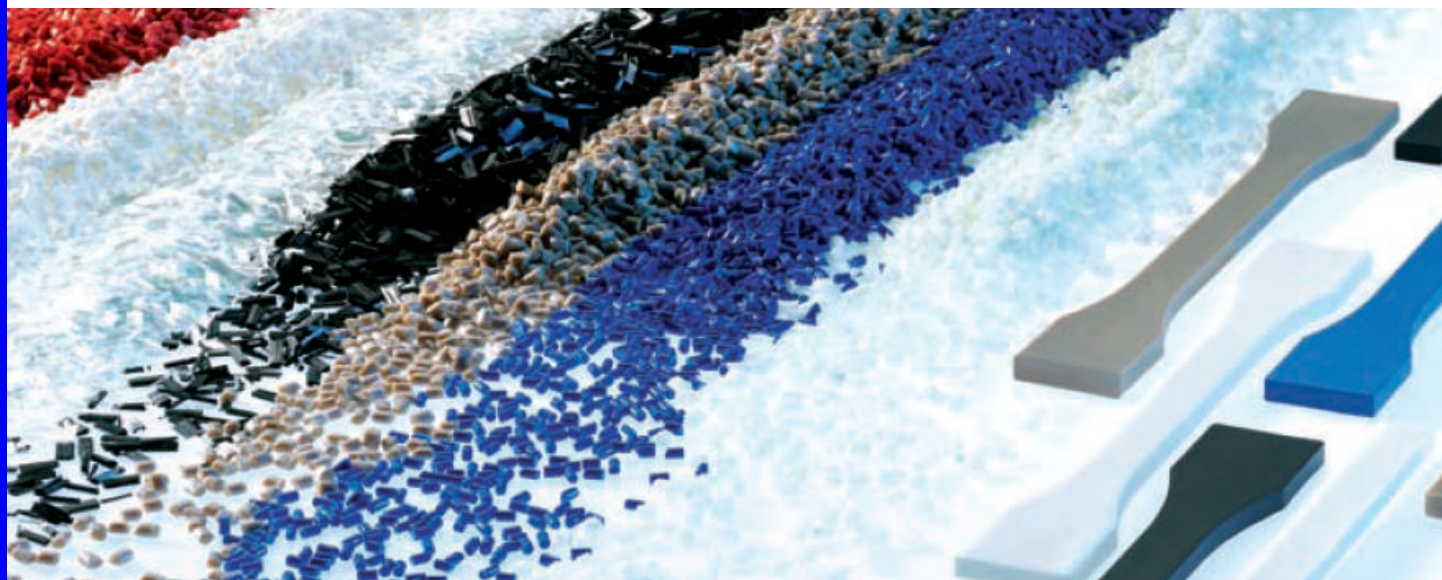


## TECACOMP® - Specialities

Materials	High temperature polymers  PEEK, PEI, PEK, PES, PPS, PPSU, PSU, PVDF	Polyamides  PA 6, PA 66, PA 11, PA 12, PA 46, PA 610, PA 611, PA 612	Engineering plastics  POM, PBT, PET, PC, PPE/PS
Tribology / Mechanics	In many applications requiring slip, the use of PTFE is felt to interfere as it is associated with lower stability and with an increased attrition rate. For these instances, ENSINGER Compounds has developed mixtures on the basis of mineral fillers. Properties can be optimised according to application thanks to the special binding of the minerals to the plastic matrix. Depending upon the loading conditions and the degree of optimisation wanted, the stability, slip/frictional coefficient or the attrition rate can be improved.		
Electrical conductivity	Electrically conductive plastics normally have a high filler content, e.g. conductive carbon black. This often causes the properties of the polymer matrix to be changed considerably. Multi-wall carbon nanotubes (MWCNT) achieve the desired effect even at a low dosage, whereby the properties of the plastics are affected to a far lesser extent. The use of MWCNT's (Baytubes®) is being advanced and further developed in cooperation with Bayer MaterialScience.		
Medical devices Food technology	Colours adjustments suitable for use in medical devices. An inorganic antimicrobial substance offers additional safety in medical technology, food technology, air-conditioning plants, water treatment and sanitary engineering. The production of our high performance plastics is certified according to <b>DIN EN ISO 13485</b> . Products from ENSINGER COMPOUNDS thus satisfy the requirements for use in medical technology applications.		
Customer projects Compound development	For your special projects, our staff in Applications Engineering will develop the right compound in close cooperation with your product specialists.		



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## Know How / Experience

<b>Experience</b>	ENSINGER has been involved in the development and production of compound specialities and special formulations for more than two decades.
<b>Materials</b>	ENSINGER COMPOUNDS process in particular thermoplastic high temperature and engineering plastics. Conventional standard polymers are also used for the production of special compounds.
<b>Quantities / Products</b>	The structure of the company, the specialisation of staff and versatile machinery provide the flexibility to prepare small quantities, as well as material for volume production. The extensive range made up of hundreds of combinations of materials and additives allows the material specialist to think in individual formulations, as well as in tried and tested standard solutions.
<b>Development</b>	Our material specialists are working all the time on basic developments and the design of special compounds for injection moulding and extrusion. With their extensive experience, they are valuable helpers in the development of special compounds for you.
<b>Quality</b>	Stability, friction properties, viscosity, residual moisture content and other properties are tested using ASTM and DIN test specimens produced by ourselves, using the most modern measuring and testing instruments. Our production is certified according to <b>DIN EN ISO 9001 : 2000</b> <b>DIN EN ISO 13485</b>