

# ALTERNATIVE QUALITY COMPOUNDS



WELCOME TO THE PROFESSIONALS  
[www.bratke-kunststoffe.com](http://www.bratke-kunststoffe.com)

## Are you looking for plastics that suit your exact expectations?

We develop customised solutions for you and implement your request quickly and responsibly.

As a mid-sized company we maintain direct contact with our customers. This allows us to handle your enquiry flexibly, as well as to adapt our work to your individual request. Thanks to our state-of-the-art technical centre and our well-equipped laboratory, we strive to enhance our products and test them for their high quality, which we guarantee our customers.

Our technical equipment allows us to test modifications made to plastics and to combine these in a new way. We can therefore develop your individual plastics to suit various purposes. We are also happy to offer you the material testing that can be conducted in our laboratory as a service.

## Our Quality Standards

Bratke Kunststofftechnik GmbH offers its clients granular material in various standards of quality. Whether we are talking about original products, compounds or Economy Class – the regular tests conducted in our in-house laboratory prove the flawless quality of our products.

**New Compounds:** Materials of this quality level fulfill the highest of expectations and support the flexible combination of modifications. For example, the sliding properties of thermoplastics can be enhanced, by applying PTFE, graphite, molybdenum disulfide, aramid powder and silicone.

Materials that are glass fibre reinforced therefore have a lower abrasion and are more durable. By adding carbon fibre the mechanical solidness, thermal conductivity and the dimensional accuracy of the plastic are enhanced. In addition, the plastic is able to conduct electricity without abrasion and the specific weight is lighter.

**Compounds:** With this level of quality you receive standard materials of best quality, which can continuously be reproduced, due to the consistent basic formula and manufacturing process. In addition, the colouring as well as modification possibilities are very extensive.

**Regranules:** Regranules: This quality description describes a granule in its second lifecycle. Regranules are usually produced from homogeneous regrind. Our suppliers handle the typed preliminary materials with great care. As soon as we receive the goods, the regrind undergoes strict quality tests. By doing so, we can reincorporate the material into the circulation safely and without hesitation.



**If you opt for our "Economy Class" products, you will actively participate in the protection of our environment and buy a convincing product at a fair price.**

## Products of Bratke Kunststofftechnik GmbH

Customers from the plastics industry will find what they need in our product range. Below is a list of our plastics with realistic modifications that we have already implemented. However, should you desire new combination possibilities according to your needs, our experienced employees will be happy to assist you. ***In addition, we can also colour many of our plastic granules in compliance with the RAL-standard in the colour you require.***

Plastic:	Advantages:	Areas of application:	
<b>PA, PPA</b> semi-crystalline, technical plastic	Bramid-plastics are easily processible; they are highly impact-resistant and solid, can resist many organic solvents and chemicals and have good mechanical properties. In addition, they are characterised by their strong shape retention against heat and their high damping capacity.	Bramid is used in the textile industry, for home appliances, in electrical engineering, for machine and apparatus engineering, for furniture building and vehicle construction, as well as in the packaging industry.	
<b>Modification possibilities:</b>			
	<b>High Performance:</b>	<b>Basic Solutions:</b>	<b>Economy Class:</b>
<b>PA 66</b>	carbon fibre, glass fibre, glass beads, mineral, aramid powder, PTFE, molybdenum disulfide, silicone, heat-stabilised, laser-markable	glass fibre, glass beads, glass beads, hollow glass beads, mineral, laser-markable, flame retardant, halogen-free, UV-stabilised, heat-stabilised, impact-resistant	glass fibre, glass beads, hollow glass beads, mineral, laser-markable, flame retardant, halogen-free, UV-stabilised, heat-stabilised, impact-resistant
<b>PA 6</b>	carbon fibre, glass fibre, glass beads, hollow glass beads, PTFE, molybdenum disulfide, silicone, heat-stabilised, laser-markable	glass fibre, glass beads, mineral, flame-retardant, laser-markable, impact-resistant, UV-stabilised, hollow glass beads	glass fibre, glass beads, mineral
<b>PA 6.6/6</b>		glass fibre, glass beads, hollow glass beads, mineral, laser-markable, flame-retardant, halogen-free, UV-stabilised, heat-stabilised	glass fibre, glass beads, mineral, laser-markable, flame-retardant, halogen-free, UV-stabilised



Modification possibilities:			
	High Performance:	Basic Solutions:	Economy Class:
PA 4.6	glass fibre, PTFE, silicone, hollow glass beads, molybdenum disulfide	glass fibre, glass beads	glass fibre, glass beads
PA 11	glass fibre, PTF, hollow glass beads, glass beads, molybdenum disulfide	glass fibre, hollow glass beads, glass beads	glass fibre
PA 12	carbon fibre, glass fibre, PTFE, silicone, heat-stabilised	glass fibre	glass fibre
PPA	carbon fibre, glass fibre, PTFE	glass fibre	glass fibre
PA 6/6T		glass fibre, mineral	glass fibre, mineral

Plastic:	Advantages:	Areas of application:
<b>POM</b> semi-crystalline, technical plastic	Braform-plastics are tough and abrasion resistant; they have a high stiffness and toughness as well as a low coefficient of kinetic friction and they are heat-resistant. Furthermore, these plastics are characterised by a low amount of water absorption, as well as a smooth surface and endurance against many	Braform is often used as a replacement for metal, for example in the areas machine, and vehicle construction, apparatus and electrical engineering, model making and furniture building, as well as in the building and packaging industry.

Modification possibilities:			
	High Performance:	Basic Solutions:	Economy Class:
POM-C	PTFE, molybdenum disulfide, silicone, impact-resistant, aramid powder	glass fibre, glass beads, mineral, hollow glass beads	glass fibre, glass beads, mineral

Modification possibilities:

	High Performance:	Basic Solutions:	Economy Class:
POM-H	aramid powder, PTFE, impact-resistant, glass fibre, hollow glass beads, glass beads, molybdenum disulfide, silicone	glass fibre, glass beads, UV-stabilised, hollow glass beads	glass fibre, glass beads, UV-stabilised, hollow glass beads

Plastic:	Advantages:	Areas of application:
PC amorphous thermoplastic	Bralon is very dimensionally stable and resistant against several organic solvents. Bralon-plastics are also very stiff, hard, solid and impact-resistant. This material has good electrical insulating properties and is flame-retardant. In addition it is characterised by high temperature endurance, little amount of water absorption as well as good translucency and a high surface gloss.	Bralon is applied when other plastics are too soft, too fragile, too easily scratched or not transparent enough. For example in vehicle construction, building construction, apparatus engineering and electrical engineering. This material is further used for lighting engineering and in the phono and photography field.

Modification possibilities:

	High Performance:	Basic Solutions:	Economy Class:
PC	carbon fibre, PTFE, UV-stabilised	glass fibre, glass beads, flame-retardancy, halogen-free	glass fibre, glass beads, flame-retardancy, halogen-free

Plastic:	Advantages:	Areas of application:
PC/ABS	This compound is easily processible and very impact-resistant and solid at the same time.	Brablend is used for vehicle construction and electrical engineering

Modification possibilities:

	High Performance:	Basic Solutions:	Economy Class:
PC/ABS		electroplatable, glass fibre, flame-retardancy, halogen-free, UV-stabilised	electroplatable, glass fibre, flame-retardancy, halogen-free, UV-stabilised

Plastic:	Advantages:	Areas of application:
<b>PEI</b> amorphous, highly temperature-resistant, technical plastic	Bratecs is highly chemical-resistant and is inherently non-flammable. It is characterised by high electrical dielectric strength, it is very solid mechanically and has good creep behaviour. In addition, Bratecs has good absorption behaviour when subjected to microwave radiation.	Bratecs-plastics are used in the automotive and electrical industry.

Modification possibilities:

	High Performance:	Basic Solutions:	Economy Class:
<b>PEI</b>		glass fibre	glass fibre

Plastic:	Advantages:	Areas of application:
<b>LCP</b> amorphous, highly temperature-resistant, technical plastic	Bralic-plastics are, in a wide temperature range, resistant against hydrolysis, weak acids and bases, alcohols, aromatics, chlorinated hydrocarbon, ester, ketone and all chemicals that cause stress cracking (except highly oxidizing acids and strong alkalies). These plastics are, in addition, inherently flame-retardant.	Bralic-plastics are used in the electronics and electrical industry, for electric connectors, electromechanical components, as well as for applications in the automotive industry and on sensors.

Modification possibilities:

	High Performance:	Basic Solutions:	Economy Class:
<b>LCP</b>	glass fibre	glass fibre	glass fibre

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Plastic:	Advantages:	Areas of application:
<b>PBT, PBT/ASA</b> semi-crystalline technical plastic	Bradur-plastics are very hard, stiff and tough, have good flow behaviour as well as good sliding and wear properties. These plastics are not just easily processible but also have high heat resistance and low moisture absorption. They are characterised by good electrical properties and a high surface gloss. In addition, this plastic is resistant against many solvents as well as weatherproof.	Bradur is used for camera technology and electrical engineering, for vehicle construction and household appliances.

Modification possibilities:			
	High Performance:	Basic Solutions:	Economy Class:
PBT	glass fibre, PTFE, silicone	glass fibre, glass beads	glass fibre, glass beads
PBT/ASA		glass fibre, glass beads	glass fibre, glass beads

Plastic:	Advantages:	Areas of application:
<b>PEEK</b> semi-crystalline high performance plastic	Brateek is very resistant against chemicals as well as temperature-resistant up to 250 degrees Celsius. This plastic has good mechanical properties, is non-flammable, it has good abrasion characteristics as well as good electrical characteristic values.	Brateek is used for electrical engineering and electronics, for vehicle construction, high voltage engineering as well as in the chemical industry.

Modification possibilities:			
	High Performance:	Basic Solutions:	Economy Class:
PEEK	carbon fibre, glass fibre, PTFE, graphite	glass fibre	glass fibre



Plastic:	Advantages:	Areas of application:	
<b>PPS</b> semi-crystalline, highly temperature-resistant, thermoplastic high performance plastic	Braton is inherently non-flammable, is chemical-resistant and heat-resistant. Braton-plastic is stiff, solid and hard, and is additionally characterised by good electrical properties as well as low moisture absorption.	Braton-plastic is suitable for moulding in the areas of electronics and vehicle construction, where it is subjected to high mechanical, electrical, thermal or chemical exposure.	
Modification possibilities:			
	<b>High Performance:</b>	<b>Basic Solutions:</b>	
	<b>Economy Class:</b>		
<b>PPS</b>	carbon fibre, glass fibre, PTFE, molybdenum disulfide	glass fibre, mineral	glass fibre, mineral
Plastic:	Advantages:	Areas of application:	
<b>PSU</b> amorphous, highly temperature-resistant, technical high performance plastic	Bradell-plastic is a high-temperature polymer and is resistant against many chemicals. Bradell is inherently non-flammable and is resistant to energy-rich radiation. This plastic is hard, solid and stiff and is characterised by good electrical insulation properties, low water absorption as well as good hydrolysis stability. Bradell is transparent and has a natural shade of yellow.	Bradell is used in electrical engineering, electronics, in vehicle construction, medicine and for household appliances.	
Modification possibilities:			
	<b>High Performance:</b>	<b>Basic Solutions:</b>	
	<b>Economy Class:</b>		
<b>PSU</b>		glass fibre	glass fibre