



AnHui JoyRun High Performance Polymer Materials Co., Ltd

Comprehensive Solutions for Specialty
Engineering Plastics

PEEK.PESU.PPSU.PSU

Comprehensive Solutions for Specialty
Engineering Plastics
Excellence·Innovation·Concentration·Integrity



Company Official Account



Company Wechat Account



JoyRun-Polymer



193-9736-9109



JoyRun@jrpolymer.com



No.1998,Jinjiang 5th Rd,Economic and Technological
Development Zone.Suzhou City, Anhui Province,China.

Driving Innovation,Empowering Global Industries.



Enterprise Introduction



PEEK/PESU/PPSU
Core product



Modified composite products



Application Scenario

Enterprise Introduction



Anhui JoyRun High Performance Polymer Materials Co., Ltd. ("Short for JoyRun Polymer") is a high-tech enterprise integrating the R&D, production, and sales of specialty engineering plastics including PEEK, PESU, PPSU, and PSU. Our experienced R&D team collaborates with university resources to enhance innovation, and works closely with customers to drive product upgrades through technological innovation, comprehensively improving performance, quality, product variety, and cost competitiveness. Doing this we build efficient and reliable one-stop comprehensive solutions.

Ours PEEK series products utilize advanced polymerization processes which can offer excellent mechanical properties, high temperature resistance, corrosion resistance, electrical properties, self-lubrication, and wear resistance. Since the market launch in 2024, our products have been widely recognized by customers for their superior performance, accelerating domestic substitution, further enhancing the competitiveness of high-end manufacturing in China, and promoting the development of the domestic polymer materials industry.

JoyRun PEEK products are available in three main grades—K10, K20, and K100—based on increasing melt fluidity. They are also categorized by morphology and reprocessing methods into pure resin granules (G series), pure resin coarse powder (P series), pure resin fine powder (FP series), glass fiber reinforced (GL series), carbon fiber reinforced (CA series), wear-resistant reinforced (FC series), resin black (BLK series), and anti static (ESD series), with customized services supported. The upgraded core product, high-purity PEEK (K21), is suitable for the medical and semiconductor fields which require high purity and low extraction.

JoyRun PPSU and PESU products feature in low halogen content and superior performance, making them suitable for high-end medical, semiconductor, and food applications.



Advantages

I. Company side : our solid and reliable strength

1. Comprehensive Management System

The company has developed a full-chain management system covering R&D, production, quality, supply chain, and after-sales service, strictly implementing standardized operating procedures. Through continuous optimization of management mechanisms, we ensure efficient operations, precise delivery, and QC quality, providing customers with a stable and reliable foundation for cooperation.

2. Over a Decade of Industry Experience

With over ten years of market presence, the company deeply understands industry trends and core customer needs, accumulating extensive technical expertise and mature solutions. Having navigated multiple industry cycles, we have maintained a steady pace of development and possess the comprehensive ability to address complex demands.

II. Product/Technology side: Professional and Strong Manufacturing Capability

1. Professional R&D and Production Team

Our core team members all have many years of industry experience, forming an end-to-end capability from product definition, technology R&D, and process implementation. Whether it is the efficient delivery of standardized products or the rapid response to customized needs, we achieve the optimal balance between technical feasibility and controllable cost.

2. Standardized Production Facility

Our modern production facility is designed and built according to high industry standards, incorporating automated equipment and digital management systems to achieve visible, traceable, and controllable production processes. Our strict QC procedures run through all stages which include incoming materials, in-process, and finished products—ensuring our products consistency, stability, and yield rate.

III. Service Side : Customer-Centric Value

1. Full-Process Collaborative Service

From requirement analysis to solution delivery, and from sample validation to mass production, our company provides collaborative services throughout the entire process. A rapid response mechanism ensures that customer issues are addressed and resolved rapidly which can reduce communication costs and improving cooperation efficiency.

2. Customized Solution Capability

Thanks to our technical expertise and flexible production capabilities, our company offers customized services, process standards, and delivery schedules according to application scenarios.



Core Products

JoyRun PEEK and PPSU products are among the top level in terms of performance in China market .

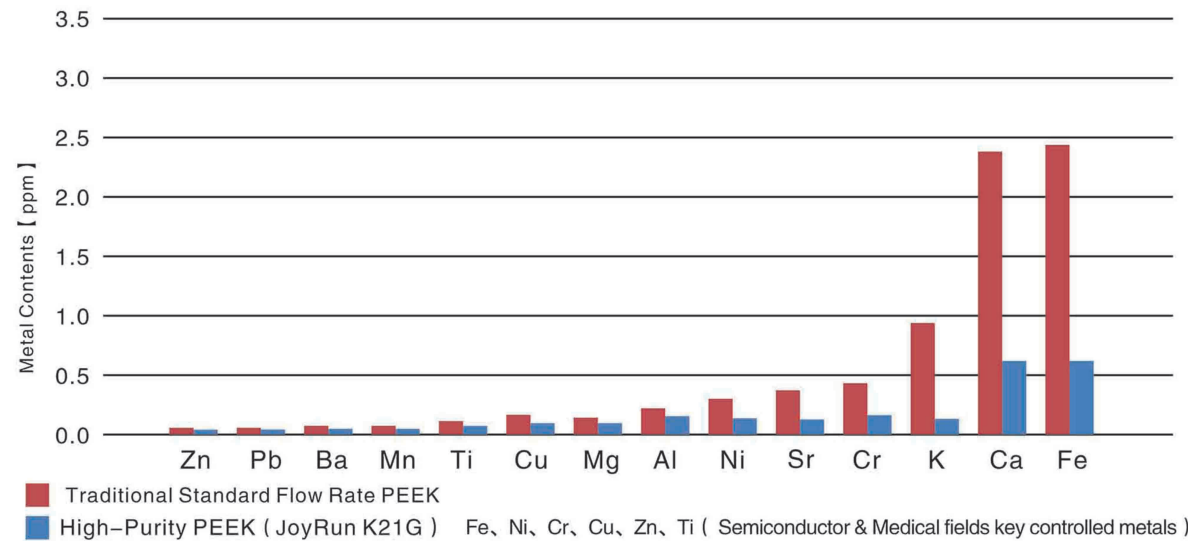
Our core products: Medical-grade and Semiconductor-grade PEEK represent an iterative upgrade of traditional products. Our PEEK products achieve breakthroughs in low fluorine content, low metal impurities, environmental compliance, and clean performance, offering superior overall performance and broader application scenarios.

- Priority for replacement: Semiconductor components, medical implants, precision electronic insulation parts, and new energy high-voltage components.

- Direction of substitution: Utilizing excellent high-temperature melt stability to replace PTFE and other fluorine -containing materials, as well as machined metal parts, achieving lightweight construction, high cleanliness, and long service life.

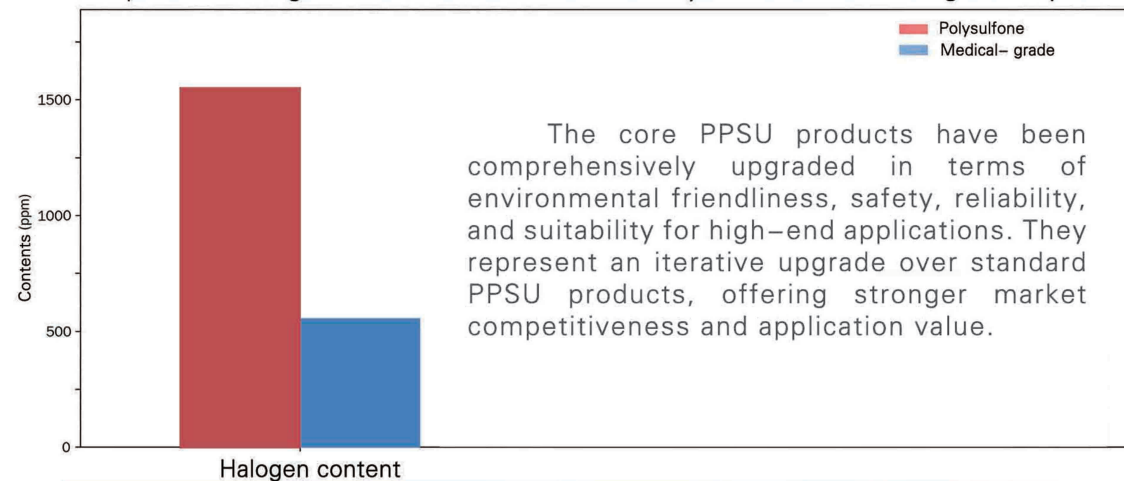
- Market value: Aligns with global trends of green manufacturing and high-end manufacturing, possessing strong competitiveness for domestic substitution and export.

ICP-MS Metal Content Analysis

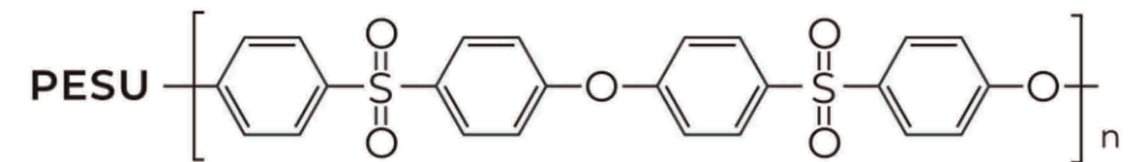
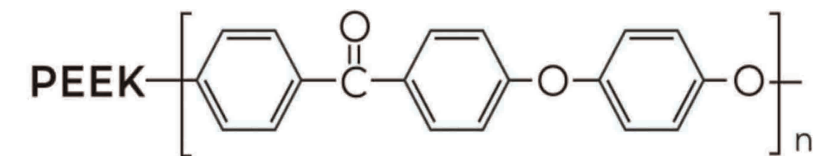
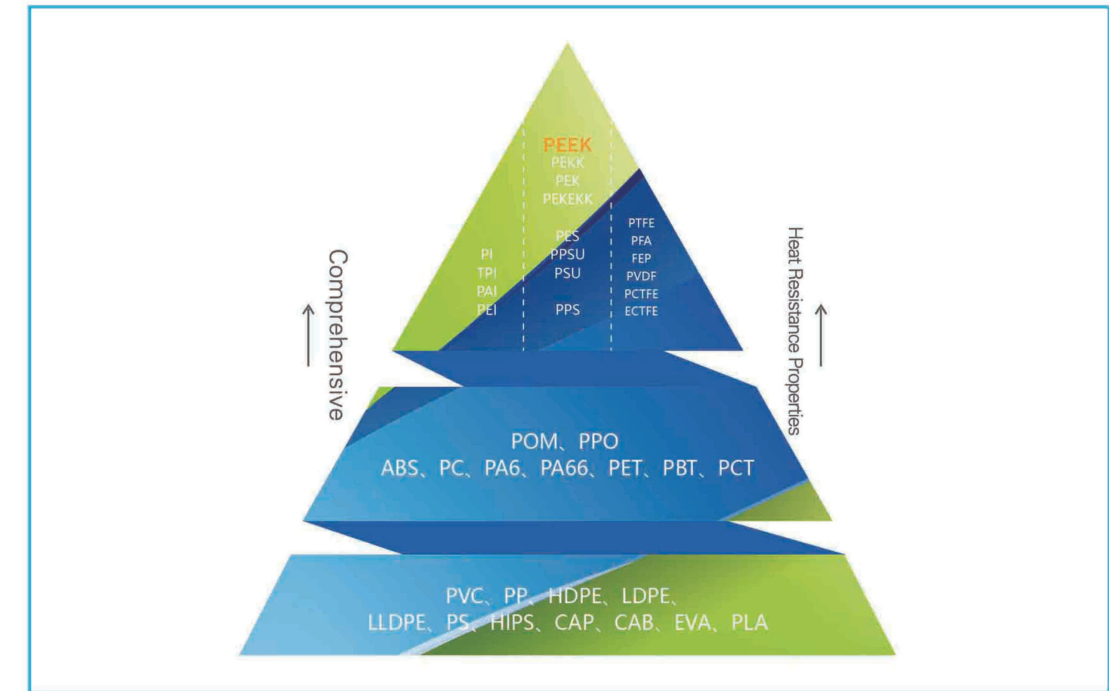


Our core products: Medical-grade and food-grade PESU and PPSU on the basis of retaining the excellent properties of polysulfone materials such as high heat resistance, high rigidity, hydrolysis resistance, and dimensional stability, reduce the halogen content from 1500-1600 ppm in standard products to below 700 ppm, achieving a reduction of over 50%.

Comparison of halogen content between Traditional Polysulfone and Medical- grade Polysulfone



Driving Innovation,Empowering Global Industries.



Product Introduction

Driving Innovation,Empowering Global Industries.

Peek main grades and typical performance indicators

Mechanical Properties

Project	Test Standard	Unit	PEEK K10G	PEEK K10GL30	PEEK K10CA30	PEEK K10LF30	PEEK K10FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20% PTFE
Tensile Properties (23℃)	ISO 527	MPa	98	180	265	145	70
Tensile Modulus (23℃)	ISO 527	GPa	4.0	11.3	23	12.5	/
Elongation at Break (23℃)	ISO 527	%	45	2.7	1.7	2.2	/
Flexural Strength (23℃)	ISO 178	MPa	165	265	370	220	118
Flexural Modulus (23℃)	ISO 178	GPa	3.8	11	23	11	/
Charpy Impact Strength (unnotched)	ISO 179/1U	kJ/m²	No break	55	45	32	No break
Izod Notched Impact Strength	ISO 180/A	kJ/m²	7	12	9.0	5	6

Thermal Properties

Project	Test Standard	Unit	PEEK K10G	PEEK K10GL30	PEEK K10CA30	PEEK K10LF30	PEEK K10FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20% PTFE
Melting Point	ISO11357	℃	343	343	343	343	343
Glass Transition Temp	ISO11357	℃	143	143	143	143	143
HDT	ISO 75A-f	1.8MPa、℃	152	328	336	293	150
Coefficient of Thermal Expansion	ASTM D696	ppm K-1	45	18	10	22	70
Thermal Conductivity	ISO/CD22007-4	W/(m · K)	0.29	0.3	0.95	0.86	/

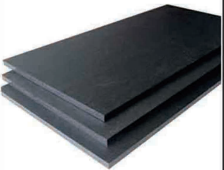
Electrical Performance

Project	Test Standard	Unit	PEEK K10G	PEEK K10GL30	PEEK K10CA30	PEEK K10LF30	PEEK K10FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20% PTFE
Dielectric Strength (2mm)	IEC 60243-1	kV/mm	23	25	/	/	19
Permittivity	IEC 62631	-	3.0	3.2	/	/	2.7
Volume Resistivity	IEC 62631	Q · cm	10 ¹⁵	10 ¹⁶	10 ⁵	10 ⁶	/

Other Properties

Project	Test Standard	Unit	PEEK K10G	PEEK K10GL30	PEEK K10CA30	PEEK K10LF30	PEEK K10FE20
			100%PEEK	PEEK+30% glass fiber	PEEK+30% carbon fiber	PEEK+30%(carbon fiber+graphite+PTFE)	PEEK+20% PTFE
color	-	-	natural color	natural color	Black	Black	natural color
MFI (Melt Flow Index)(300℃, 5kg)	ISO 1133	g/10min	8-12	3-6	2-4	2-5	/
Density	ISO 1183	g/cm	1.30 ± 0.02	1.50 ± 0.02	1.40 ± 0.02	1.44 ± 0.02	1.41 ± 0.02
Water Absorption(23℃, 24Hrs)	ISO 62-1	%	0.07	0.05	0.04	0.05	0.15
Moulding Shrinkage Rate	Parallel to flow	%	1.1	0.3	0.1	0.3	1.3
	Vertical to flow	%	1.3	0.8	0.5	0.6	1.8
Shore Hardness	ISO 868	/	85	88	88	83	84
Flammability Rating	UL 94	/	V-0	V-0	V-0	V-0	/
Coefficient of Friction	ASTM D3702	100N-120rpm	0.30-0.38	0.38-0.46	0.15-0.25	0.18-0.30	0.1-0.2

*This Parameter is a representative value , not a guaranteed value .
Please contact us if you want to know more detail .

Grade	PEEK K10G	PEEK K10CA30	PEEK K10GL30	PEEK K10LF30
Resin				
Sheet, Rod , Tube				
Finished Parts				