

EnhancePolymer Characteristics





KIMIA JAVID SEPAHAN Co.

KJS Kimia Javid Sepahan (KJS), one of the subsidiary companies of Modern Product Jahanara (MPJ) Industrial Group, is an innovative knowledge-based company that was established to produce various kinds of polymer compounds in 1998. Currently KJS production capacity is approximately 100,000 tons per year and it has more than 400 employees with an excellent polymer Research center. With having a wide range of products with more than 300 different grades in six major categories as cross-linkable polyethylene, reinforced polymer compounds, coating compounds, functionalized polymers, Masterbatches, and hot-melt adhesives, KJS can provide its customers with the best quality materials. As an innovative, leading, and dynamic, KJS aims to implement novel technologies in the polymer industry. To achieve these goals, the company has successfully received ISO 9001:2015, ISO 29001:2010, ISO 14001:2015, ISO 45001:2008, and ISO IEC 17025 from TUV Austria Cert. Furthermore, All kinds of KJS compounds related to food and hygienic products are certified by the Ministry of Health and Medical Education of Middle East.

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The filled and reinforced polymer compounds and polymer alloys produced by Kimia Javid Sepahan Company (KJS) are supplied and distributed under the registered brand names of Kimfill and Kimalloy, respectively.

These compounds are produced based on different types of general purpose polymers including polyolefines (polyethylene and polypropylene) and engineering polymers such as polyamide (PA6, PA66), polybutylene terephthalate (PBT), polyethylene terephthalate (PET), polycarbonate (PC).

These products are injection grade unfilled, filled or reinforced compounds with various mineral filler and reinforcers such as talc, calcium carbonate, glass fiber and special additives. In comparison to the regular plastics with features such as impact resistance, flexibility, rigidity, creepage, thermal resistance, inflammability, etc., these compounds have superior technical specifications.

These compounds are mostly used in production of automobile parts, home appliances, electrical and electronic parts and some other products. These compounds are the ideal solution for a wide number of applications requiring a good cost/performance ratio, and they are fully recyclable material and can be reused.







These materials are based on homo-polypropylene and co-polypropylene in combination with a special rubber (such as EPDM). Compounding polypropylenes with rubbers causes increasing impact resistance, flexibility, and strain at the break of the compounds. These products can be flame retardant and UV resistant.

These alloys are offered for the production of injection parts and various applications such as home appliances, automotive parts such as exteriors, interiors, underhood parts, industrial parts, electrical parts, etc.

Characteristics of polypropylene alloys:

- High impact
- Excellent processability
- Resistant to environmental conditions
- Flame resistant
- All formulations can also be developed to meet specific market needs.



		P	POLYPE	ROPYL	ENE A	LLOY	S	
		ty		Applica	ation			
Product Name	Color	Flammabili (UL94)	Home Appliances	Automotive parts	Electrical & Electronic	Industrial Parts	Specification	
Kimalloy 3000	Black	НВ					 High mechanical properties High impact Appropriate processability 	
Kimalloy 3011	Gray	НВ					Economical grade	
Kimalloy 3043	White	V-0					 High mechanical properties Flame resistance 	
Kimalloy 3044	Black	V-0					 High mechanical properties Flame resistance 	
Kimalloy 3050	Black	НВ					Appropriate economical and mechanical features	
Kimalloy 3052	Black	НВ					> Economical grade	
Kimalloy 3082	Black	НВ					 High softness Appropriate processability 	
Kimalloy 3084	Black	НВ					High softnessHigh impact	
Kimalloy 3090	Black	НВ					 Excellent mechanical properties High impact Appropriate processability 	





KJS presents different grades of filled polyolefin which are used in various polymer industries with different colors and applications.

Kimfill 42XX series are injection grade filled compounds with various mineral filler such as talc, calcium carbonate, and special additives and fillers. Colored ones of these compounds are for automotive, home appliances, and interior design. These compounds are the ideal solution for a wide number of applications requiring a good cost/performance ratio, and they are fully recyclable material and can be reused.

All formulations can also be developed to meet specific market needs.

	FILLED POLYOLEFIN COMPOUNDS											
		ent	ase		Applio	ation						
Product Name	Color	Filler Cont (%)	Polymer B	Home Appliances	Automotive parts	Electrical & Electronic	Industrial Parts	Specification				
Kimfill 4220	Black	20	PP					 ➤ High impact resistance ➤ Excellent processing ➤ Injection grade 				
Kimfill 4221	Natural	20 (Talc)	PP					➤ Excellent mechanical properties ➤ Injection grade				
Kimfill 4224	Black	24	PP					➤ Economical and mechanical features ➤ Injection grade				
Kimfill 4226	Black	25 (Talc)	PP					➤ High impact & scratch resistance ➤ Injection grade				
Kimfill 4240	Black	40 (Mineral)	PP					 ➤ Appropriate economical and mechanical features ➤ Injection grade 				
Kimfill 4242	Black	40 (Talc)	PP					➤ Good mechanical properties ➤ Injection processing				
Kimfill 4280	Black	20 (Talc)	PP					 ➤ Appropriate economical and mechanical features ➤ Injection grade 				





REINFORCED COMPOUNDS POLYOLEFIN REINFORCED COMPOUNDS

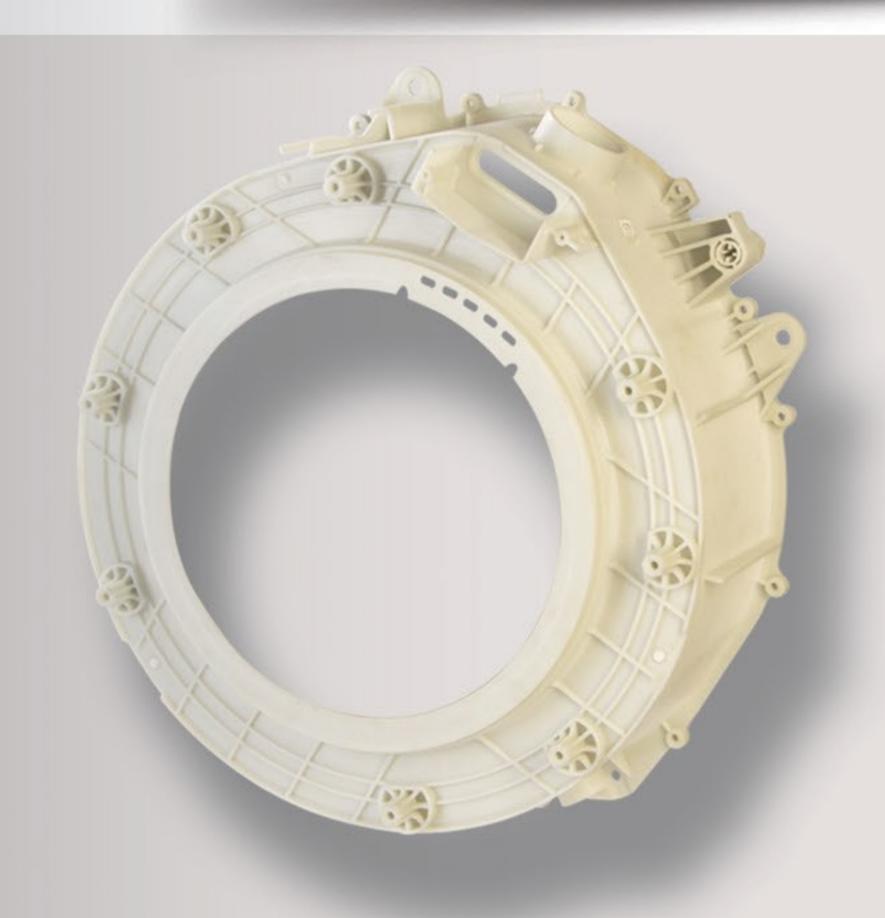
KJS presents different grades of reinforced polyolefin (PP & PE) which are used in various industries with different colors and applications. Kimfill 43XX and Kimfill 47XX are reinforced compounds. with glass fiber and various modifying materials such as UV / light stabilizer, impact modifier, heat-stabilizer, and other mineral fillers. Colored ones of these compounds are for automotive, home appliances, interior design. These compounds are the ideal solution for a wide number of applications requiring a good cost/performance ratio, and they are fully recyclable material and can be reused.

All formulations can also be developed to meet specific market needs.





	POLYOLEFIN REINFORCED COMPOUNDS										
					Applio	cation					
Product Name	Color	Glass fiber (%)	Polymer Base	Home Appliances	Automotive	Electrical & Electronic	Industrial Parts	Specification			
Kimfill 4321	Natural	20	PP					 Excellent processing Piping industry Extrusion grade 			
Kimfill 4323	Red	23	PP					 Excellent processing Piping industry Extrusion grade 			
Kimfill 4326	Black	26	PP					 Excellent processing Extrusion & injection molding 			
Kimfill 4331	Natural	30	PP					 Excellent tensile strength High impact resistance Excellent processing 			
Kimfill 4332	Black	30	PP					Appropriate economical and mechanical features			
Kimfill 4333	Natural	33	PP					 Excellent tensile strength High impact resistance Excellent processing 			
Kimfill 4336	Black	32	PP					 Excellent tensile strength High impact resistance Excellent processing 			
Kimfill 4338	Black	32	PP					 Appropriate mechanical properties Injection grade 			
Kimfill 4346	Black	22	PP					 Appropriate mechanical properties Injection grade 			
Kimfill 4720	Black	20	PE					 Internal & External automotive parts Injection & extrusion grade 			











Polyamide 6 or 66 has high toughness and high mechanical strength. In dry conditions and low temperatures, the impact strength is quite low and the water absorption rate is high. Due to the above defects appearing at low temperatures, PA application becomes limited. Owing to the marketing demand and competition, material performance is required more critically. Modified Polyamides are developed successfully and effectively to improve nylon with anti-cold, hi-impact, and high toughness. These materials are an impact-modified polyamide that is a blend of polyamide with a special kind of rubber. These types of materials are known as "tough" and "super-tough" Polyamide in the plastic industry. These materials have several grades in different colors and applications.

Characteristics of polyamide alloys:

- High strength of bending and flexibility
- Excellent impact resistance
- High thermal resistance
- Resistant to environmental conditions
- All formulations can also be developed to meet specific market needs.



			POLY	AMID	EAL	LOYS	
				Applio	ation		
Product Name	Color	Base Polymer	Home Appliances	Automotive parts	Electrical & Electronic	Industrial parts	Specification
Kimalloy 3105	White	PA66					Excellent StrengthExcellent Thermal Resistance
Kimalloy 3120	Black	PA6					Good ImpactHigh Strength
Kimalloy 3141	Gray	PA6					High ImpactGood Strength
Kimalloy 3175	White	PA6					Excellent ImpactGood Strength
Kimalloy 3178	Black	PA6					 Excellent Impact Good Strength Flame Resistance
Kimalloy 3180	Black	PA6					High ImpactGood Strength
Kimalloy 3182	Black	PA6					High ImpactGood Strength
Kimalloy 3184	Black	PA6					High ImpactGood Strength
Kimalloy 3195	Natural	PA6					Good ImpactHigh Strength







KJS presents different grades of reinforced polyamide 6 & 66 which are used in various industries with different colors and applications. Modification of Polyamide by compounding with glass fiber and other modifying additives ensures high impact resistance and excellent mechanical properties of the material. It results in invaluable material properties like extreme rigidity and stiffness, minimal warpage, and high dimensional stability. Kimfill 46XX and 45XX series include a wide range of viscosity numbers and contain various glass fiber content, heat stabilizer, and other additives so that they are fully recyclable.

All formulations can also be developed to meet specific market needs.

	POLYAMIDE 6 REINFORCED COMPOUNDS										
					Appli	cation					
Prod	luct Name	Color	Glass fiber (%)	Home Appliances	Automotive parts	Electrical & Electronic	Industrial Parts	Specification			
Kim	nfill 4628	Black	30					 Appropriate tensile strength Appropriate impact resistance and processing 			
Kim	nfill 4630	Black	30					 Excellent tensile strength High impact resistance Excellent processing 			
Kim	nfill 4631	Natural	30					 Excellent tensile strength High impact resistance Excellent processing 			
Kim	nfill 4636	Black	35					Excellent tensile strengthHigh impact resistance			
Kim	nfill 4638	Black	40					Excellent tensile strengthHigh impact resistance			
Kim	nfill 4640	Black	35					Excellent tensile strengthHigh impact resistance			
Kim	nfill 4650	Black	50					Excellent tensile strengthHigh impact resistance			



	POLYAMIDE 66 REINFORCED COMPOUNDS												
				Appli	cation								
Product Name	Color	Glass fiber (%)	Home Appliances	Automotive parts	Electrical & Electronic	Industrial Parts	Specification						
Kimfill 4520	Black	20					 Excellent processing Appropriate mechanical properties 						
Kimfill 4530	Black	30					Excellent mechanical properties and thermal stability						
Kimfill 4531	Natural	30					Excellent mechanical properties and thermal stability						
Kimfill 4532	Black	30					Appropriate economical and mechanical features						
Kimfill 4536	Black	35					Excellent mechanical properties and thermal stability						
Kimfill 4549	Natural	49					Excellent mechanical properties and thermal stability						







SPECIAL ALLOYS											
				Appl	lication						
Product Name	Color	Base Polymer	Home Appliances	Automotive parts	Electrical & Electronic	Industrial Parts	Specification				
Kimalloy 3240	Black	PC/ABS					 Excellent mechanical properties High impact strength 				
Kimalloy 3299	White	ABS					➤ High strength and glossy				
Kimalloy 3320	Black	PBT/PET					➤ High thermal resistance➤ Dimensional stability				
Kimalloy 3436	Black	PE/EVA					Excellent flexibilityAppropriate mechanical properties				
Kimalloy 3481	Transparent	PE					 Excellent flow properties Glossy and low temperature toughness 				













