

ARYLMAX® IA

Arylmax® IA is a series of alloys or blends of selected Poly(aryl ether ketones), (PAEKs) and certain Polyimides. The resulting products offer enhanced thermal-mechanical resistance while maintaining the generally excellent properties of PAEKs. These properties include excellent chemical resistance against organic solvents, strong acids and bases, together with low wear rate, abrasion resistance, fire resistance and electrical insulating characteristics. Specifically, Arylmax® IA of PEEK and PEKK offer excellent load-bearing capabilities at high temperatures between 200 °C and 350 °C, while their ductility and melt processibility allows for their use in molded articles, tubes, sheets, films and fibers.

Arylmax® IA polymers can also be compounded with traditional reinforcements such as carbon or glass fiber for more extreme high strength structural applications; designed wear packages improve friction and wear requirements; other packages satisfy special demands such as electro-static, dissipative and high energy resistance.

BENEFITS

EXCELLENT CHEMICAL RESISTANCE

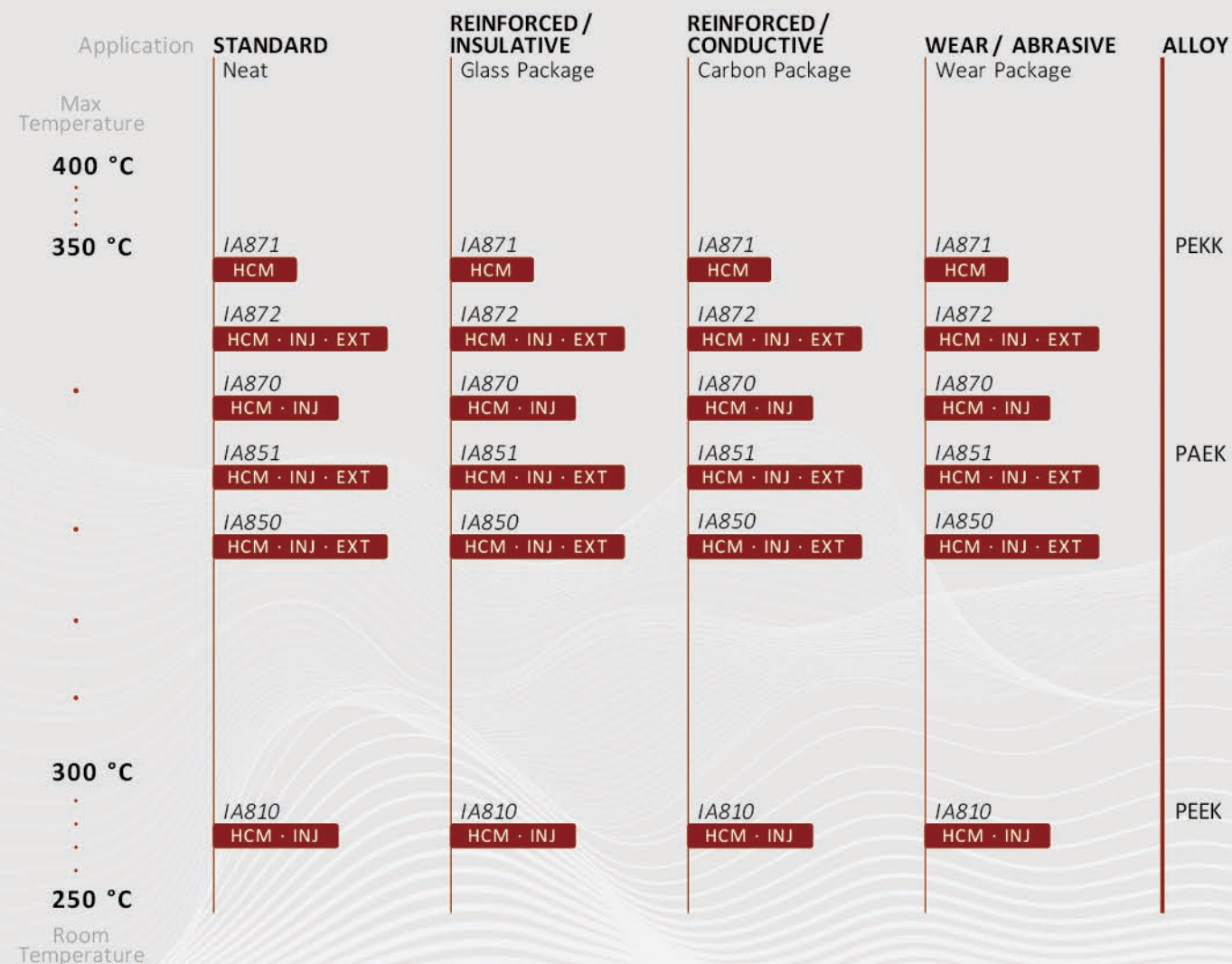
MANAGED MOISTURE ABSORPTION

INHERENTLY GOOD WEAR AND ABRASION RESISTANCE

HIGH HEAT RESISTANCE

CUSTOMIZED RESIN FORMULATIONS AND PROPERTIES DELIVER IN SHAPE FORM

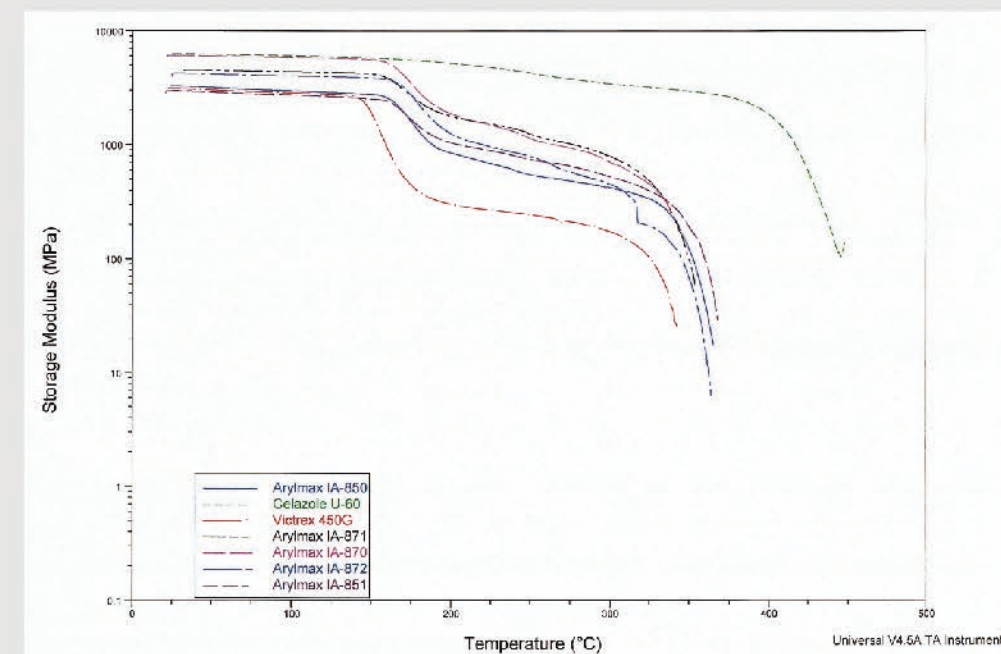
PRODUCT SELECTION GUIDE - HIGH HEAT ALLOY & BLEND



Arylmax® IA Product Line by Polymics®

Product Code	Filler	Available Process				Max Use Temperature	Features
		HCM	EXT	INJ	CAM		
IA-810	Unfilled	Y	?	Y	N	≤280	PEEK Blends; moderate high heat thermoplastics
	Glass Fiber	Y	?	Y	N	≤310	
	Carbon Fiber	Y	?	Y	N	≤320	
	Wear Grade	Y	?	Y	N	≤310	
IA-850	Unfilled	Y	Y	Y	?	≤330	PAEK Blends; Injection moldable for seal & other non-structural applications
	Glass Fiber	Y	Y	Y	N	≤330	
	Carbon Fiber	Y	Y	Y	N	≤340	
	Wear Grade	Y	Y	Y	N	≤330	
IA-851	Unfilled	Y	Y	Y	?	≤340	
	Glass Fiber	Y	Y	Y	N	≤340	
	Carbon Fiber	Y	Y	Y	N	≤350	
	Wear Grade	Y	Y	Y	N	≤340	
IA-870	Unfilled	Y	?	Y	N	≤340	PEKK Blends; Enhance strength at high temperature
	Glass Fiber	Y	?	Y	N	≤350	
	Carbon Fiber	Y	?	Y	N	≤350	
	Wear Grade	Y	?	Y	N	≤350	
IA-871	Unfilled	Y	?	?	N	≤350	PEKK Blends; Enhance strength at high temperature
	Glass Fiber	Y	?	?	N	≤350	
	Carbon Fiber	Y	?	?	N	≤350	
	Wear Grade	Y	?	?	N	≤350	
IA-872	Unfilled	Y	Y	Y	?	≤340	PEKK Blends; Enhance strength at high temperature
	Glass Fiber	Y	Y	Y	N	≤350	
	Carbon Fiber	Y	Y	Y	N	≤350	
	Wear Grade	Y	Y	Y	N	≤350	

Listed are based on current availability and suggested existing applications



SUMMARY

Arylmax® IA product line is Polymics® solution to high heat application requirements where better chemical and environmental resistance is also important. It covers application temperature ranges as high as 350 °C when properly designed. It is available as injection moldable compounds, wide range of stock shapes utilizing our innovative manufacturing processes, as well as near net shape for cost effective part and component demands.