

Ketoprix™ aliphatic polyketones are novel, engineering thermoplastic resins that provide superior toughness, strength, resilience & chemical resistance. We offer flame retardant, fiber reinforced compounds using the Polyketone base resin with added thermal stabilizers and lubricants. Ketoprix™ FR compounded resins are available in pellet form for use in conventional injection molding.

Esprix Ketoprix™ Aliphatic Polyketone Compound Product Data Sheet

Flame Retardant Grades EKT23G3F1L, EKT23G2F1L

Engineered Resins for Injection Molding

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PRODUCT CHARACTERISTICS

Ketoprix™ EKT23G3F1L and EKT23G2F1L resins are thermoplastic aliphatic polyketone compounds where the polyketone base polymer consists of perfectly alternating α -olefins and CO to give the 1,4-diketone polymer backbone structure. To this base resin, various flame retardant additives and glass fiber reinforcement, plus additional processing aids and lubricants, are added to achieve desired flame retardant and processing performance.

These compounded resins are formulated for Injection Molded parts where higher strength and stiffness are required. Ketoprix™ EKT23G2/3F1L compounds are typically used in E&E, Automotive and Industrial End Uses.

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MATERIAL PROPERTIES

	Standard	EKT23G2/3F1L
Physical		
Density (g/cm ³)	ASTM D792	1.4-1.6
Mold Shrinkage (Flow Direction, %)	ASTM D955	~1.0
Thermal		
Melting Temperature, (°C)	ASTM D1525	220
Viscosity, (Pa-s, 280°C)		500-1000
Deflection Temperature	ASTM D648	
HDT 0.45MPa (°C)		-
HDT 1.82MPa (°C)		-
Flammability	UL94	V0
Mechanical		
Tensile Strength, 23°C (MPa)	ASTM D638	90-130
Nominal Strain at Break, (%)	ASTM D638	5-8
Tensile Modulus, 120°C (GPa)	ASTM D638	5-9
Flexural Strength, 120°C (MPa)	ASTM D790	150-200
Flexural Modulus 120°C (GPa)	ASTM D790	5-8

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PROCESSING

KETOPRIX™ Polyketone flame retardant, glass fiber reinforced compounds are processable in conventional Injection Molding (IM) equipment. More information about IM operation of KETOPRIX™ Polyketone resins is contained in our [KETOPRIX™ Injection Molding Guide](#). The key to processing KETOPRIX™ Polyketones is to minimize holdup and residence time as much as possible. Please consult your Esprit compounding representative for more information.

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**ENVIRONMENTAL,
HEALTH & SAFETY**

KETOPRIX™ Polyketone resins are not hazardous. For information on handling and storage of KETOPRIX™ Polyketone resins, please consult our Safety Data Sheets, available from Esprit Technologies.

For more detailed information, please contact your representative at Esprit Technologies.

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REGULATORY

KETOPRIX™ Polyketone resins comply with all regulatory statutes in the USA.

For more detailed information on regulatory compliance outside the USA, please contact your representative at Esprit Technologies.

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Ketoprix™ Polyketones are not intended to be used in vivo, as implantations inside the human body, or have contact with internal body fluids or tissues unless otherwise so indicated by Esprit in a separate written supply agreement and purchase contract.

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