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

Esprix Ketoprix™ Aliphatic Polyketone Compound Product Data Sheet

Fiber Reinforced, Wear Resistant Grades EKT33G3P2 (Natural)

Engineered Resins for Injection Molding

1 PRODUCT CHARACTERISTICS

Ketoprix™ EKT33G3P2 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, fiber reinforcement, additional thermal stabilizers and high wear-resistant lubricants are added to achieve desired mechanical performance.

These compounded resins are formulated for Injection Molded parts where higher strength and stiffness combined with high wear resistance and low surface friction are required. Ketoprix™ EKT33G3P2 compounds are typically used in E&E, Automotive, Consumer, Appliance and Industrial End Uses.

2 MATERIAL PROPERTIES

	Standard	EKT33G3P2
Physical		
Density (g/cm³)	ASTM D792	~1.4
Mold Shrinkage (Flow Direction, %)	ASTM D955	~1.0
Thermal		
Melting Temperature, (°C)	ASTM D1525	220
Viscosity, (Pa-s, 280°C)		100-300
Deflection Temperature	ASTM D648	
HDT 0.45MPa (°C)		
HDT 1.82MPa (°C)		
Mechanical		
Tensile Strength, 23°C (MPa)	ASTM D638	130
Nominal Strain at Break, (%)	ASTM D638	6
Tensile Modulus, 23°C (GPa)	ASTM D638	8.2
Flexural Strength, 23°C (MPa)	ASTM D790	200
Flexural Modulus 23°C (GPa)	ASTM D790	7.5

3 PROCESSING

KETOPRIX™ Polyketone fiber reinforced, high wear-resistance 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 Esprix compounding representative for more information.

4 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 Esprix Technologies.

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

5 REGULATORY

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

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

6 CONTACT US

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