

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

# Esprix Ketoprix™

## Aliphatic Polyketone Compound

### Product Data Sheet

#### Fiber Reinforced Grades

#### EKT33G2L, EKT33G3L (Natural)

## Engineered Resins for Injection Molding

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### PRODUCT CHARACTERISTICS

Ketoprix™ EKT33G2L and EKT33G3L resins are thermoplastic aliphatic polyketone compounds where the polyketone base polymer consists of perfectly alternating  $\alpha$ -olefins and CO to give the 1,4-diketone polymer backbone structure. To this base resin, fiber reinforcement, additional thermal stabilizers and lubricants are added to achieve desired mechanical performance and to assist in injection molding.

These compounded resins are formulated for Injection Molded parts where higher strength and stiffness are required. Ketoprix™ EKT23G3C2/3 compounds are typically used in E&E, Automotive and Industrial End Uses.

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### MATERIAL PROPERTIES

	Standard	EK33G2L	EKT33G3L
<b>Physical</b>			
Density (g/cm <sup>3</sup> )	ASTM D792	~1.4	~1.5
Mold Shrinkage (Flow Direction, %)	ASTM D955	~1.0	~1.0
<b>Thermal</b>			
Melting Temperature, (°C)	ASTM D1525	220	220
Viscosity, (Pa-s, 280°C)		100-300	100-300
Deflection Temperature	ASTM D648		
HDT 0.45MPa (°C)			-
HDT 1.82MPa (°C)			-
<b>Mechanical</b>			
Tensile Strength, 23°C (MPa)	ASTM D638	80-90	80-90
Nominal Strain at Break, (%)	ASTM D638	2-4	2-4
Tensile Modulus, 23°C (GPa)	ASTM D638	6-7	8-9
Flexural Strength, 23°C (MPa)	ASTM D790	120-130	130-140
Flexural Modulus 23°C (GPa)	ASTM D790	5-6	7-8

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### PROCESSING

KETOPRIX™ Polyketone 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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### CONTACT US

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