

Ketoprix™ aliphatic polyketones are novel, engineering thermoplastic resins that provide superior toughness, strength, resilience & chemical resistance. Ketoprix™ resins are available in pellet form for use in conventional injection molding. Ketoprix molds quickly, with low warpage and delivers high first-quality rates.

Esprix Ketoprix™ Aliphatic Polyketone Product Data Sheet

Low Melt Flow Extrusion Grade EK73, EKT73 (Natural)

Engineered Resins for Extrusion

1

PRODUCT CHARACTERISTICS

Ketoprix™ EK73 and EKT73 resins are thermoplastic aliphatic polyketones containing a 1,4-diketone backbone structure. They are produced from ethylene, propylene and CO with perfectly alternating olefin and CO monomers in the backbone.

These resins are low MF extrusion resins and are well suited for extruded shapes such as tubing and smaller diameter pipe. Ketoprix™ EK73 and EKT73 have excellent flow properties, high chemical resistance and are used for pipe, tube and profiles in Auto, Oil & Gas, CPI, and other Industrial End Uses.

2

MATERIAL PROPERTIES

	Standard	EK73, EKT73
Physical		
Density (g/cm ³)	ASTM D792	1.24
Mold Shrinkage (Flow Direction, %)	ASTM D955	1.8 – 2.0
Water Content (23°C, 60% RH, %w)	ASTM D570	0.45
Thermal		
Melting Temperature, (°C)	ASTM D1525	220
Melt Flow Rate 240°C, 2.16kg	ASTM D1238	3 g/10min
Deflection Temperature	ASTM D648	
HDT 0.45MPa (°C)		210
HDT 1.82MPa (°C)		105
Flammability	UL94	HB
Mechanical		
Tensile Strength, 23°C (MPa)	ASTM D638	65
Nominal Strain at Break, (%)	ASTM D638	250
Tensile Modulus, 23°C (GPa)	ASTM D638	1.6-2.2
Flexural Strength, 23°C (MPa)	ASTM D790	60
Flexural Modulus 23°C (GPa)	ASTM D790	1.6
Charpy Impact Strength, 23°C (kJ/m ²)	ASTM D256	20-50
Rockwell Hardness (R Scale)	ASTM D785	105
Electrical		
Volume Resistivity, (Ω-cm)	ASTM D257	10 ¹⁵
Dielectric Strength, (KV/mm)	ASTM D149	17

3

PROCESSING

KETOPRIX™ Polyketone resins are processable in conventional extrusion equipment. Much more information about extrusion operations of KETOPRIX™ Polyketone resins are contained in our [KETOPRIX™ Extrusion Guide](#). Additional Chemical Resistance data are available in the [Chemical Resistance Guide](#). The key to processing KETOPRIX™ Polyketones is to minimize holdup and residence time as much as possible. Additional thermal stability is available with the EKT resins that contain added thermal stabilizers and antioxidants.

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

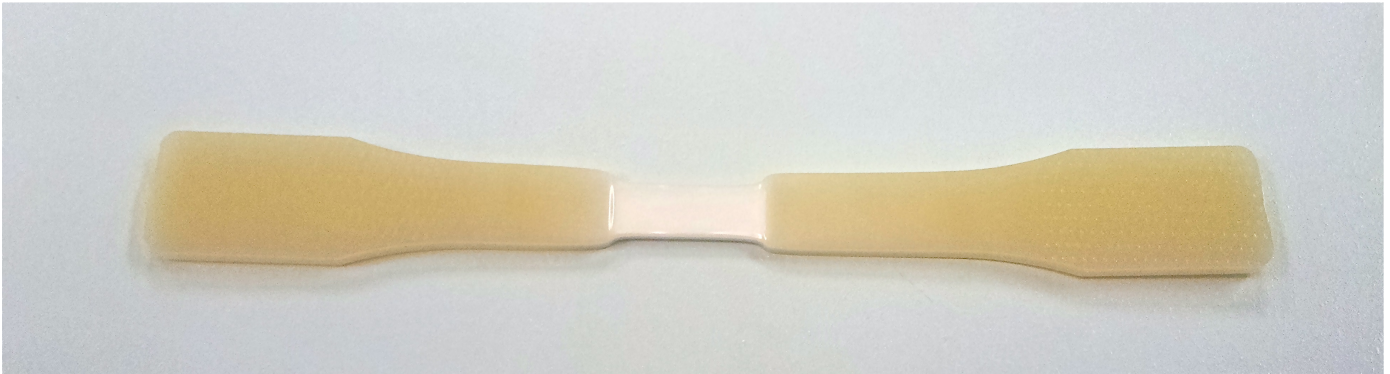
CONTACT US

Esprix Technologies
Cary A. Veith

7680 Matoaka Road
Sarasota, FL 34243

cveith@esprixtech.com
www.esprixtech.com

941-355-5100 ext. 100



The data and descriptions listed herein are presented for your information only and fall within the normal range of properties. These data should not be used to establish specification limits nor used alone as the basis for design. The user of these products should make appropriate tests to determine whether the product(s) are suitable for a given purpose prior to use. Esprix Technologies assumes no obligations or liability for any advice furnished or for any results obtained with respect to this information. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, product(s) described, designs, or data may be used without infringing the intellectual property rights of others. In no case shall the product(s) described, designs or data provided be presumed to be a part of our terms and conditions of sale. All such advice is given and accepted at the buyer's risk. The disclosure of information herein is not a license to operate under, or a recommendation to infringe, any patent of Esprix or others. Esprix makes no warranties and assumes no liability in connection with any use of this information.

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 Esprix in a separate written supply agreement and purchase contract.

Copyright © 2015 Esprix Technologies. All rights reserved.