Ketoprix™ aliphatic polyketone engineering thermoplastics from Esprix Technologies – a resin family which offers a truly unique combination of properties

Ketoprix™ aliphatic polyketone is a semi-crystalline resin produced from carbon monoxide and alpha olefins. Its perfectly alternating structure of olefins and carbon monoxide results in a resin with a unique combination of physical, wear, rheological, barrier and chemical resistance properties.

- **High strength & ductility**, a tensile elongation at break of 250% and a yield strain of 25% in unreinforced grades
  - Excellent for use in snap fit assemblies
  - Impact resistance superior to PA, POM, PBT, PPS and PVDF at RT and -40 C
- **Exceptional chemical resistance** – even at elevated temperatures
- **Excellent hydrolysis resistance** with strength & toughness virtually unaffected even when immersed in boiling water for 1000 hours
- **Much lower water absorption** than PA66 or PA6
  - Better dimensional stability
  - Virtually no strength loss when wet
- **Superior wear properties** vs. PA & POM – unusually low wear in like-kind pairs
  - Quieter gear operation with no need for lubrication
  - Superior creep resistance to PA & POM
- **Excellent barrier resistance** to oxygen, moisture and hydrocarbon fuels
  - Compares favorably to HDPE, PA11, PA12, PA 6/12 and PET
  - Excellent for automotive fuels and power train systems
  - Excellent for oil & gas pipelines, liners and umbilicals
- **Ease of molding** with low melt viscosity and rapid crystallization rates
  - Ability to easily fill very thin wall sections with long flow lengths
  - Typical cycle time reductions typically in the range of 15-25% vs. PA66, PA6 and POM.
- **Nearly isotropic mold shrinkage** permits production of tight tolerance parts with virtually no warpage
- **Excellent resistance** to common steam, EtO, beta and gamma irradiation sterilization techniques

Want to know more about Ketoprix™ polyketone resins? Please visit our website or contact Mr. Dang Le at DLe@Esprixtech.com or 281.969.8763

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