LubriOne™ PKE Formulations

The LubriOne PKE series consists of specialty engineered, internally lubricated polyketone (PK) thermoplastics. These grades combine excellent chemical resistance and dimensional stability with improved wear resistance and low coefficient of friction (COF) properties. These characteristics offer manufacturers a high-performing, cost-effective and more eco-conscious alternative to nylon (PA66 and PA6) and acetal (POM).

Helping to improve sustainability over the end-product lifecycle, these formulations offer a reduced carbon footprint as a result of the PK base resin. The production of PK emits up to 61 percent less carbon dioxide (CO$_2$) than nylon and POM. Additionally, the grades are formaldehyde-free, addressing VOC concerns in manufacturing versus POM.

Available in natural and black grades, LubriOne PKE grades can be colored at the press. When processing, these formulations have similar shrink to nylons and POM, set up quickly, and have short cycle times. The formulations can also be customized to meet specific application needs, such as improved UV stability.

KEY CHARACTERISTICS
• Inherently low COF
• Excellent wear resistance
• Excellent chemical resistance
• Low moisture uptake
• Excellent dimensional stability
• Cost-effective
• Eco-conscious alternative to PA66, PA6 and POM

MARKETS & APPLICATIONS
These materials are ideal for use in applications requiring lubricated solutions, as the formulations have improved wear, chemical, and hydrolysis resistance over nylons (PA6 or PA66). LubriOne PKE formulations also offer improved chemical resistance and thermal performance, plus reduced flammability, over POM.

• Industrial – conveyor belts
• Electronics – gears & switches
• Appliance – pumps & spigots