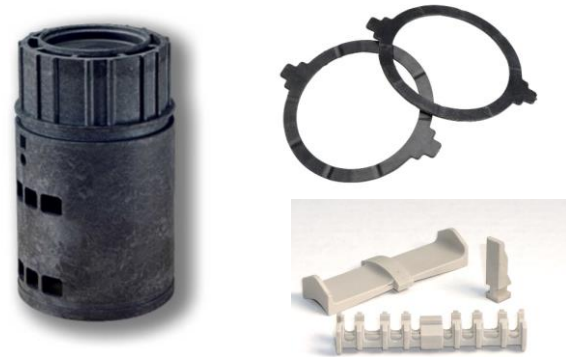


LNPT™ COMPOUNDS WEAR AND FRICTION SOLUTIONS HIGH TEMPERATURE MATERIALS

Design engineer look to replace metal parts and components with thermoplastics whenever possible. Not only can they be produced more cost-effectively, they offer greater design flexibility, weigh less and resist corrosion. The availability of high temperature resins like PEEK, PPS, PPA and PEI can stretch the use of thermoplastic even further.



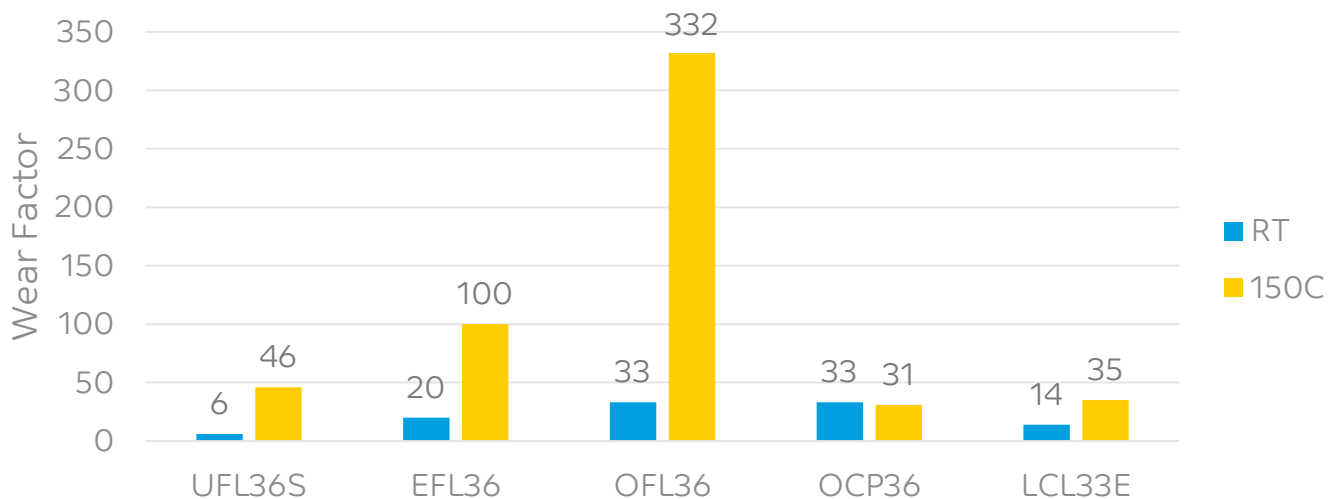
IF YOU CAN'T STAND THE HEAT...

While auto under-the-hood and industrial machinery might be the first to come to mind, high temperature application are not always driven by hot operating environment. Some application that may never see elevated use temperatures have to survive a hot manufacturing environment (lead-free solder, paint ovens). High temperature generally feature good chemical resistance as well.

INTERNALLY LUBRICATED COMPOUNDS

The addition of an internal lubricant to a thermoplastic material can improve the wear resistance and can reduce the coefficient of friction in plastic parts. Traditional lubricants like PTFE and PTFE/Si blends are common. Compounds made with high temperature resins can provide wear performance comparable with externally lubricated metal parts.

WEAR AT ELEVATED TEMPERATAURES



ASTM3702- mod. @ 50 fpm, 40psi
* Wear factor [10^{-10} . in³ .min/ft.lb.hr]

WEAR AND FRICTION SOLUTIONS

HIGH TEMPERATURE RESINS

LUBRICATED HIGH HEAT SOLUTIONS

Grade	Description	Features
LUBRICOMP™ ECL36XXQ	PEI, 30% carbon fiber, 15% PTFE	FM: 26.3 GPa, HDT:208C, low wear and COF, dimensional accuracy
LUBRICOMP OCL36	PPS, 30% carbon fiber, 15% PTFE	FM: 21.1GPa, HDT:263C, low wear and COF, chemical resistance, dimensional accuracy
LUBRICOMP UCL36S	PPA, 30% carbon fiber, 15% PTFE	FM:22.7 GPa, HDT: 279C, low wear and COF, chemical resistance
LUBRICOMP LCL33E	PEEK, 15% carbon fiber, 15% PTFE	FM: 14.7 GPa, HDT: >240C, low wear and COF, chemical resistance, UL94-V0@1.5mm
LUBRICOMP LX91475	PEEK, carbon fiber, graphite, PTFE	FM: 10.3 GPa, HDT: 335C, chemical resistance, superior bearing performance, UL94-V0@0.720mm
LUBRICOMP OFL36	PPS, 30% glass fiber, 15% PTFE	FM: 11.1GPa, HDT:257C, chemical resistance, low wear and COF, UL94-V0@0.75 mm,
LUBRICOMP EFL36	PEI, 30% glass fiber, 15% PTFE	FM:11.4GPa, HDT:204C, good impact, tight tolerance, low wear and COF, UL 94 V0 @ 0.75 mm
LUBRICOMP UFL36S	PPA, 30% glass fiber, 15% PTFE, heat stabilized	FM: 11.2 GPa, HDT: 255C, Good balance of cost and performance, low wear and COF
LUBRICOMP JX91198	PES, carbon fiber, graphite, PTFE	FM: 9.24 GPa, HDT: 228C, tight dimensional tolerance, superior wear and bearing performance
LUBRICOMP LL004	PEEK, 20% PTFE	HDT: 154C, Excellent chemical resistance, low wear and COF
LUBRICOMP OL004	PPS, 20% PTFE	HDT: 102C, Good chemical resistance, low wear and COF
LUBRICOMP EL003	PEI, 15% PTFE	HDT: 182C, Dimensional accuracy, low wear and COF, UL94-V0@1.7 mm
LUBRICOMP UL002S	PPA, 10% PTFE, heat stabilized	HDT: 110C, Good balance of cost and performance, low wear and COF

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