

Technical Literature D-03

Wear/Friction Properties of AURUM[®] under Oil Lubrication

Because of its high glass transition temperature, the AURUM[®] wear/friction grades have a higher critical PV than that of other super engineering plastics. For this reason, AURUM[®] is finding applications for automotive transmission parts such as thrust washers and seal rings, among other things.

Table 1 makes a comparison of the critical PA of the wear/friction grades of AURUM[®], PEEK, Non-Thermoplastic PI and PAI under oil-lubrication and nonlubricant conditions.

Table 1 Comparison of Critical PV under Oil-lubrication and Nonlubricant Conditions

Material and grade	Critical PV value in oil*		Critical PV value under nonlubricant conditions
	Against stainless steel	Against Al	Against stainless steel
AURUM [®]			
JCL3030	7500	-	2000
JCF3030	7500	-	1000
JCQ6225	-	7500	1000
PEEK wear/friction grade	6200	3800	1000
Non-Thermoplastic PI	6200	7500	5000
PAI wear/friction grade	6200	1000	600

* Thrust-type friction/wear test:
 V = 250 m/min fixed, with no oil circulation
 Oil: ATF oil

The information contained herein is based on the information and data available at this moment, but none of the data or evaluation results contained herein provide any warranty whatsoever.