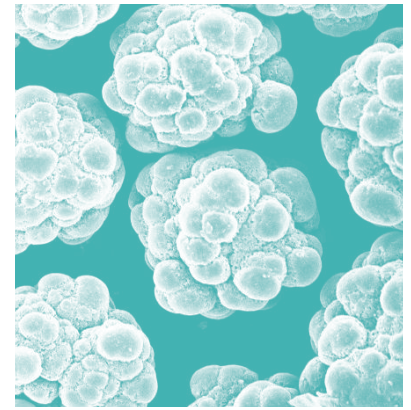


# Ekonol® Case Study #7:



## K Factors for 25% Ekonol®/PTFE Running against Various Metal Surfaces

The effect of using various metals for the mating surface can be seen in the table below. Comparing this data to the K factor of  $3 \times 10^{-10}$  obtained against carbon steel shows that minimal wear could be expected using brass surface. The wear against anodized aluminum is equivalent to that with the carbon steel, while cast iron and stainless steel

seem to double the wear rate. If the aluminum is not anodized, the wear rate is extremely severe, both on the Ekonol®/PTFE surface and on the metal surface. No scratching or weight loss of the metal washers could be detected-unanodized aluminum is the only exception.

### K FACTORS FOR 25% EKONOL®/PTFE RUNNING AGAINST VARIOUS METAL SURFACES<sup>1</sup>

Metals	K factors
1040 carbon Steel	$3 \times 10^{-10}$
Brass	$1 \times 10^{-10}$
304 Stainless Steel	$6 \times 10^{-10}$
410 Stainless Steel	$7 \times 10^{-10}$
Cast Iron	$6 \times 10^{-10}$
Anodized 6063 Aluminum	$3 \times 10^{-10}$
6063 Aluminum	$2500 \times 10^{-10}$

<sup>1</sup> Surface finish of 12 - 16 RMS