



COEFFICIENT OF
FRICTION TESTING
UHMW & KRYPTANE POLYURETHANE

Lab Report

Test Material	Condition	Angle of Repose θ	Static Coefficient of Friction, $\tan \theta$
UHMW White	Dry	13°	.23
	Wet	12°	.21
UHMW Blue	Dry	14°	.25
	Wet	14°	.25
Argonics 80A Red	Dry	15°	.27
	Wet	13°	.23
Argonics 90A Red	Dry	11°	.19
	Wet	11°	.19

TESTING METHODS USED

The following test was performed to compare the coefficients of friction of several materials. A piece of steel with a surface area of 2.5 square inches and a mass of 300 grams was placed on the test material. One side of the test material was elevated until the steel piece began to slide. The angle at which this took place (angle of repose) was recorded. The test was conducted first with both surfaces dry and then with both surfaces wet. Static coefficient of friction is equal to the tangent of the angle of repose.