HyPact VHMW PE

Description: VHMW is environmentally stabilized, making it ideal for indoor and outdoor applications. FDA and USDA approved, with an opaque, white color for a sanitary look. Smooth, non-skived finish has a low friction coefficient for better material flow. Not affected by most aqueous acids, alkalis or salt solutions. Suitable for deep-freeze or electrical insulation operations.

Thermal and Mechanical Properties:

Density *(g/cm³)*		
ASTM	D792	0.95
Tensile Properties		
Maximum Strength (PSI)		
ASTM	D638	3800 psi
Elongation at Break (%)		600
Impact Brittleness Temperature *(degrees F)*		
ASTM	D746	-100
Impact Strength (ft-lbs/in²)		
ASTM	D256	No Break
Hardness, shore D		
ASTM	D2240	68
Coefficient of Kinetic Friction		
Carbon Steel vs. Hy-Pact VH		
ASTM	D1894	.18 vs. .24
Heat Deflection Temperature at 66 psi *(degrees F)*		
ASTM	D648	160
Vicat Softening Point (degrees F)		
ASTM	D1525	255
Coefficient of Linear Thermal Expansion *(in/in/degrees F)*		
ASTM	D696	7.0×10^{-5}

Abrasion Resistance:

King Plasic Corp. Sand Slurry Test
Sand-slurry test vs. carbon steel, with carbon steel assigned the value of 100. Lower values indicate lower weight loss/greater abrasion resistance.

Taber Industries Abrasion Test
Average weight loss in grams after 5,000 cycles.

Material	Relative Value	Weight Loss
Steel	100	.57
King Hy-Pact® UH	4	.0115
King Hy-Pact® VH	15	.038
HMW PE	21	.046
HDPE	36	.056

The values quoted are typical lab results and must not be regarded as supply specification.