

PolyGlobal HyperPol™ Hydro



Hyperpol™ is a series of polyurethane elastomers. Key benefits include good abrasion, chemical & hydrolysis resistance, high elongation & tensile strength and low temperature flexibility.

Hyperpol™ Hydro is an Ether based polyurethane specifically designed for applications with exposure to humidity or water and low temperatures. It also offers excellent resistance to microbial, fungal & bacterial growth. Hyperpol™ Hydro is utilised for applications which require higher rebound properties due to its quick return of energy and smaller energy absorption.

- ✓ Outstanding hydrolysis resistance
- ✓ Maintains flexibility at low temperatures
- ✓ Excellent rebound & memory
- ✓ Utilised for protection applications
- ✓ Excellent transparency
- ✓ Good abrasion resistance

Grade	UoM	HYA80	HYA85	HYA93	HYD52	HYD60
Hardness	Shore A	81	87	93	-	-
Hardness	Shore D	-	-	-	52	60
100% Modulus	MPa	4	6	10	18	20
300% Modulus	MPa	8	10	17	25	29
Tensile Strength	MPa	28	34	40	40	45
Elongation at Break	%	700	600	590	520	490
Tear Strength	N/mm	90	110	130	200	230
Abrasion Loss	mm ³	50	40	40	45	45

Definition of Terms	
Hardness	The resistance of a material to indentation.
100% Modulus	The force needed to stretch a material to twice its original length.
300% Modulus	The force needed to stretch a material to four times its original length.
Tensile Strength	The force needed to stretch a material until it breaks.
Elongation at Break	How much a material can stretch before it breaks, as a % of its original dimensions.
Tear Strength	The maximum force required to tear a test specimen perpendicular to the direction of the stress. Higher numbers indicate higher resistance to tearing.