



Zurcon® Z80

SPECIALLY ENGINEERED POLYMER FOR DEMANDING APPLICATIONS

A premium grade ultra high molecular weight Polyethylene.

THERMOPLASTIC BASE

UHMW PE

COLOUR

White to Offwhite

*) The Colour of the material may have variations in shading.

PROJECTED SERVICE TEMPERATURES

Minimum* -200°C
Maximum* +80°C

*) Maximum and minimum service temperature are given only as indication and can vary strongly on product shape and application conditions.

TYPICAL APPLICATIONS

Air and Gases, Water based, lubricating and non-lubricating fluids.

Dry air pneumatics. Linear and slowly turning movements.

High abrasion and extrusion resistance. Good chemical resistance.

For service in abrasive conditions and media with particles.

INDUSTRY SPECIFICATION / ASTM CALLOUTS

ASTM callouts not specified.

1*) Material is approved according to ASTM testing

2*) Material was tested independent of ASTM methods.

Results are only to be considered as similar.

ADDITIONAL CODES

Z801, Z801N, Z801V, Z802E, Z80AM, Z80E, Z80E7, Z80EC, Z80ED, Z80EH, Z80EL, Z80EM, Z80FE, Z80H, Z80HD, Z80HH, Z80HL, Z80HM, Z80J3, Z80KM, Z80LM, Z80MM, Z80N, Z80N7, Z80NA, Z80NK, Z80PH, Z80PM, Z80S, Z80SD, Z80SE, Z80SH, Z80SL, Z80SM, Z80SS, Z80SX, Z80SZ, Z80T, Z80TM, Z80V, Z80V2, Z80V8, Z80VC, Z80XM, Z80XX

MATERIAL REFERENCE

None



PROPERTIES SPECIFICATION

Test Criteria*	Test Conditions	Unit	Test Specification	Requirements
Density	N/A	g/cm ³	ASTM D 792	0.93 +/-0.01
Ball Indention Hardness	N/A	MPa	ISO 2039-1	min. 29
Tensile Stress @ Break	N/A	MPa	DIN 53504 / S2	min. 32.0
Elongation @ Break	N/A	%	DIN 53504 / S2 w/o extensometer	min. 400

TYPICAL ENGINEERING PROPERTIES

Test Criteria*	Test Conditions	Unit	Test Specification	Typical Value**
Density	N/A	g/cm ³	ASTM D 792	N/A
Ball Indention Hardness	N/A	MPa	ISO 2039-1	N/A

Mechanical Properties				
Tensile Stress @ Break	N/A	MPa	DIN 53504 / S2	N/A
Modulus 100%	N/A	N/A	DIN 53504 / S2	N/A
Elongation @ Break	N/A	%	DIN 53504 / S2 w/o extensometer	N/A

* All tests were carried out on standard samples. Values can vary on final product.

** Typical values are given only as indication and actual results may vary depending on material batch.

Time within () means the test has been performed after that duration. For e.g. (25H) means test was performed after 25H.

N/A: Value is not available.