



MAIN FEATURES

- Very good wear and abrasion resistance
- Low coefficient of friction
- Very low water absorption
- Excellent chemical resistance
- High impact strength
- Excellent machinability

COLOUR | Black

PROPERTIES

	Typical value	Units	Test method
DENSITY	0.93	g/cm ³	
WATER ABSORPTION	<0.01	%	DIN EN ISO 62
FLAMMABILITY (UL94)	HB		DIN IEC 60695-11-10

MECHANICAL PROPERTIES

	Typical value	Units	Test method
MODULUS OF ELASTICITY (TENSILE TEST)	650	MPa	DIN EN ISO 527-2
TENSILE STRENGTH	40	MPa	DIN EN ISO 527-2
TENSILE STRENGTH AT YIELD	17	MPa	DIN EN ISO 527-2
ELONGATION AT BREAK	>50	%	DIN EN ISO 527-2
MODULUS OF ELASTICITY (FLEXURAL TEST)	800	MPa	DIN EN ISO 178
COMPRESSION STRESS AT 1%/2%/5%	6.5/10.5/17	MPa	EN ISO 604
COMPRESSION MODULUS	2300	MPa	EN ISO 604
IMPACT STRENGTH	Not broken	kJ/m ²	DIN EN ISO 179-1eU
NOTCHED IMPACT STRENGTH	115P	kJ/m ²	DIN EN ISO 179-1eA
SHORE HARDNESS D	60		DIN EN ISO 868
WEAR RESISTANCE SAND-SLURRY	100		ISO-15527

THERMAL PROPERTIES

	Typical value	Units	Test method
MELTING TEMPERATURE	135	°C	DIN 53765
SERVICE TEMPERATURE (LONG TERM)	-250...80	°C	
SERVICE TEMPERATURE (SHORT TERM)	120	°C	
HEAT DEFLECTION TEMPERATURE	79	°C	DIN EN ISO 306 VICAT B



ELECTRICAL PROPERTIES

	Typical value	Units	Test method
SPECIFIC SURFACE RESISTANCE	10^{12}	Ω	DIN IEC 60093
SPECIFIC VOLUME RESISTANCE	10^{14}	$\Omega \cdot \text{cm}$	DIN IEC 60093

AVAILABLE

SEMI-FINISHED PRODUCTS

SHEETING	2 to 100 mm*
ROD	\varnothing 20 to \varnothing 200 mm*
TUBE	At request

* Other dimensions can be delivered at request.

We produce customized finished UHMPE products according to your specifications.

This can be based on a drawing or model.

Any questions about products or make an enquiry? Simply call +31 180 46 34 71 or send us an e-mail at sales@ridderflex.nl