

# UHMW-PE diet

Ultra-high molecular weight polyethylene

Standard colour: white

- Very good chemical and mechanical properties
- Resistant to mineral oil, HFD-U, HELG = biological base, acid oils and gases, cold water
- Applicable for Rod and Piston Seals, Wiper seals, Rotary Seals and Static Seals

Properties	Value	unit	DIN Standard
density	0,93	g/cm <sup>3</sup>	ISO 1183
density stress	17	MPa	ISO 527
Elongation at rupture	>50	%	ISO 527
Tensile modulus	720	MPa	ISO 527
hardness Rockwell (R/L/M)	D63		ISO 868, ISO 2039-2
Izod test at 23 °C	80	KJ/m <sup>2</sup>	ISO 180/1A
Ball indentation hardness	38	MPa	ISO 2039-1
Thermal conductivity	0,42	W/K m	DIN 52 612
Linear expansion	200	10 <sup>-6</sup> /K	ISO 11359
Melting temperature	132	°C	ISO 11357
Temperature strength A	42	°C	ISO 75 HDT/A 1.8
Temperature strength B	65	°C	ISO 75 HDT/B 0,45
max. service temperature short	120	°C	
max. service temperature constant	80	°C	
min. service temperature	-200	°C	

#### Confirmation according FDA

Hereby we, M.Wilhelmsen A/S, confirm, that all single components used for our compound named «**UHMW-PE diet**» are listed on Code of Federal Regulation of U.S. Food and Drug Administration (FDA), Rockville MD. They are mentioned under following subchapters: **FDA § 177.1520, CFR title 21 & 178.2010, CFR title 21**