



Wefapress®

flex line®

Standard colour(s): light green
Special colour(s): RAL-K7
Fields of application:

- automobile industry
- mechanical engineering
- transport and conveyor systems
- cement- and limestone works

Properties:

- Low coefficient of friction to enhance material flow
- Long life sliding abrasion application – often outlasting steel
- Chemical and corrosion resistant
- Absorbs noise and impact
- Moisture repellant
- Shatter resistant

Material designation		flexline®	
Raw material	PE-UHMW		
Material colour(s)	light green		
Properties	Unit	Test method	Value
Molecular weight (average molar mass)	g/mol		> 4,4 Mio.
Mechanical properties			
Density	g/cm ³	DIN 53479	0,96
Tensile strength	N/mm ²	DIN 53455	27
Shore D hardness, 15s - Value	Skala D	DIN 53505	64 – 67
Ball indentation hardness, 30s - Value	N/mm ²	DIN ISO 2039 Part 1	38
Ultimate tensile strength	N/mm ²	DIN 53455	40,5
Elongation at break	%	DIN ISO / R 527	400
Modulus of elasticity	N/mm ²	DIN 53457	700
Notched impact strength (Charpy)	kJ/m ²	DIN 53453	> 80 – 140
Abrasion	%	Sand slurry method	100
Coefficient of friction	μ		~ 0,2
Thermal properties			
Dimensional stability under heat	°C	DIN 53461	47
Vicat softening temperature	°C	DIN 53460	79
Crystalline melting range	°C	DTA	130 – 135
Thermal conductivity at 23 °C	W/ (K * m)	DIN 52612	0,42
Specific heat at 23 °C	kJ/ (K * Kg)		1,8
Coefficient of linear expansion at 23 °C	10 ⁻⁵ * (1/K)	DIN 53752	20
Fire behaviour		UL 94	HB
Application temperature (min.)	°C		- 200
Application temperature (constant)	°C		+ 80
Moisture absorption	%		< 0,01
Electrical properties			
Specific volume resistance	Ω * cm	DIN 53482	> 10 ¹⁵
Surface resistance	Ω	DIN 53482	> 10 ¹⁴
Dielectric strength	kV/mm	DIN 53481	45
Dielectric constant at 50 Hz		DIN 53485	1,9