Wefapress® St 1000® Wear Indicator (DIN16972 TG2)

Standard colour(s): green / white
Special colour(s): red / white
Fields of application:
- bulk transport
- screw conveyor
- funnel
- container
- channels

Properties:
- **signalizes the degree of wear**
- low abrasion
- high bending- and impact strength
- temp. range - 200 / + 80 °C
- thermic deformation before installation is possible

Material designation	St 1000® Wear Indicator		
Raw material	PE-UHMW		
Material colour(s)	green / white		
Properties	**Unit**	**Test method**	**Value**
Molecular weight (average molar mass)	g/mol		~ 5 Mio.
Mechanical properties			
Density	g/cm³	DIN 53479	0,956
Tensile strength	N/mm²	DIN 53455	27
Shore D hardness, 15s - Value	Skala D	DIN 53505	64 – 67
Ball indentation hardness, 30s - Value	N/mm²	DIN ISO 2039 Part 1	38
Ultimate tensile strength	N/mm²	DIN 53455	40,5
Elongation at break	%	DIN ISO / R 527	400
Modulus of elasticity	N/mm²	DIN 53457	700
Notched impact strength (Sharpy)	kJ/m²	DIN 53453	> 80 – 140
Abrasion	%	Sand slurry method	100
Coefficient of friction	µ		0,1 – 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

- approved for foodstuffs according to FDA Guidelines 21CFR177.1520 and 21 CFR178.3297