

PE-UHMW PLASTICS

PRODUCT INFORMATION - SPECIFICATIONSHEET PE 2000 - F-Ex No. 999

Multilene® PE 2000 F-Ex is a virgin UHMW-PE polymer (9,2 mio. g/mol) with advanced flame retardent properties. This material is halogen free ! Even with the additive used to extinguish the flame, great gliding properties and good wear resistance are still achieved through using the highest polymer possible. With its high impact strength, it was designed for such applications in conveyor systems used in the mining field.

The flame retardent classification is measured to UL (Underwriters Laboratories) standard using the methode UL94 = V0, vertical flame test.

Properties:

- Flame retardent
- halogen free
- anti-static properties
- low friction for great wear properties
- UV-stabilized for outside use
- High wear resistency for heavy duty applications

Color: black-silver no. 999

Tested against following flammability standards and corresponding rating:

DIN 5510-2	flammability grade S4
FMVSS 302	does not burn
UL 94	V-0
Application fields:	off-road transportation, construction industry mechanical engineering mining industry

Characteristics and standard values

	METHOD	UNITS	VALUE
PHYSICAL PROPERTIES			
Density	ISO 1183-A	g.cm ³	1.01
Abrasion (Sand-Slurry-Test)	internal method	%	125
Notched Impact Stength (Charpy)	ISO 11542-2	mJ/mm ²	>80
Tensile strength	ISO 527	N/mm ²	>17
Break elongation	ISO 527	%	>50
Creep properties under varying compressive stress < 10 % in 7 days	max.	N/mm ²	10
Coefficient of friction	ASTM 1894	static μ	0.15
		dynamic μ	0.08
Shore-Hardness	ISO 868	D	62
Water absorption		%	< 0.1

	METHOD	UNITS	VALUE
THERMAL PROPERTIES			
Melt point DSC	ISO 3146	°C	135 - 137
Permanente operation temperature, max.	-	°C	80
Coefficient of linear expansion	ISO 11359	23 - 80°C	$\approx 2.0 \times 10^{-4} / ^\circ\text{C}$
ELECTRICAL PROPERTIES			
Volume resistivity	IEC 60093	$\Omega \cdot \text{cm}$	$\leq 10^6$
Surface resistivity	IEC 60093	Ω	$\leq 10^9$

The above data are based on the present knowledge and are given without guarantee.
Existing laws and conditions are to be respected by the user of our products.

sheet and finished products