QUICKSILVER[®]



Quicksilver, based on a PE-UHMW grade with extremely high molecular weight, has been specifically developed as truck lining material. Specific additives render this grade outstanding release properties for sticky bulk materials (asphalt, clay, coal, fly ash, gravel, gypsum, limestone, salt, sand, sludge, topsoil, ...), combined with the impact strength and corrosion and wear resistance inherent to PE-UHMW. Quicksilver truck liners offer all-weather performance, minimal clean-up, reduced downtime and long life.

Physical properties (indicative values)

Average moler mass (average molecular weight) - (1) 10^{4} g/mol9Average moler mass (average molecular weight) - (1) 10^{4} g/mol9DensityISO 1183-1 gcm^{2} 0.935Water absorption a saturation in water of 23 °C 5^{4} coll 5^{4} collThermal Properties (2)100 °C mol135 10^{4} collThermal conductivy at 23 °C 7^{4} coll 7^{4} coll 10^{4} collThermal conductivy at 23 °C 7^{4} coll 7^{4} coll 10^{4} collThermal conductivy at 23 °C 7^{4} coll 7^{4} coll 10^{4} collThermal conductivy at 23 °C 7^{4} coll 7^{4} coll 7^{4} collThermal conductivy at 23 °C 7^{4} coll 7^{4} coll 7^{4} collAverage worlds for long of lon	PROPERTIES) Test methods	Units	VALUES	Legend:
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Inverse Inverse Inverse Inverse 	Colour			dark grey	
DensityISO 1183-1 $gram9.335Mether discrption at saturation in water of 23 °C-%<0.1$	Average molar mass (average molecular weight) - (1)	-	10 ⁶ a/mol	9	calculated by means of the Margolies-equation
Water absorption at seturation in water of 23 °C%< 0.1Thermal Properties (2)10°C 11357-11/3°CMelling temperature (DSC, 10°Chin)ISO 11357-11/3°CAverage coefficient of linear thermal expansion between 23 and 100 °CW(K,m)0.40Average coefficient of linear thermal expansion between 23 and 100 °C°C42Meta softening temperature of deflection under load:°C42method A: 18 MPaISO 75-11/2°C42Vicat softening temperature - vST/B50ISO 306°C80Max. allowable service temperature in air:°C120for short perseture (5)°C120- or oth properties (3)°C120- or oth properties (3)°C120- according to UL 94 (6 mm thickness)No120- according to UL 94 (6 mm thickness)No120- ensist erising 10ISO 527-11/2%250- ensist erising 11ISO 527-11/2%250- ensist erising 10ISO 527-11/2%250- ensist erising 10ISO 527-11/2%250- ensist erising 10ISO 527-11/2%250- ensist erising 10ISO 527-11/2%250- ensist erising 11ISO 527-11/2%250- ensist erising 11ISO 527-11/2%250- ensist erising 11ISO 527-11/2%250- ensist erising 11ISO 527-11/2%250- ensist eris into the eris into the eris into the erising		ISO 1183-1	<u>u</u>	-	M = 5.37 x 10 ⁴ x $[\eta]^{1.49}$, with $[\eta]$ being the intrinsic viscosity
Thremal Properties (2)Maima Properties (2)ISO 11357-11-3"CMaima Iroperature (DSC, 10 °C/min)ISO 11357-11-3"CThermal conductivity at 23 °CWI(Km)0.40Average coefficient of linear thermal expansion between 23 and 100 °Cmm(m,k)Temperature of election under nearingISO 75-11-2°CTemperature of election under nearingISO 75-11-2°CVicat softening temperature (DSC)1SO 306°CMar. allowable service temperature in air:·°C- for both periods (3)·°C- or thoth periods (3)·°C- continuously; for 20.000 h(4)·°CHammabilly (6):·°C- orogen in dex'ISO 4589-11-2%- according to UL 94 (6 mm thickness)··- tensile strain at vield (9)ISO 527-11-2%- tensile strain at vield (9)ISO 527-11-2%- tensile strain at vield (9)ISO 527-11-2- tensile strain at vield (9)ISO 173-17-12- tensile strain a					
Melling temperature (DSC, 10 °C/min)ISO 11357-11-3°C135The figures guent for these properties are for the most part derived for warege coefficient of linear thermal expansion between 23 and 100 °C··Average coefficient of linear thermal expansion between 23 and 100 °C···Temperature of deflection under load: - method A: 1.8 MPa·········Vicat softening temperature - VST/B50ISO 306°C80Max. allowable service temperature in air: - or short portiols (3)·········Min. service temperature (5)·°C140Hin service temperature (6)·· <td></td> <td></td> <td></td> <td>-</td> <td></td>				-	
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-for short periods (3) - °C -for short periods	Vicat softening temperature - VST/B50	ISO 306	°C	80	
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Flammability (6):	Min. service temperature (5)	-	°C	-150))	
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- at 1 MHz IEC 60250		JEC 60250	-	-	
	Dielectric dissipation factor tan δ: - at 100 Hz	IEC 60250	-	-	1
Comparative tracking index (CTI) IEC 60112	- at 1 MHz	IEC 60250	-	-	
	Comparative tracking index (CTI)	IEC 60112	-	-	

Note: 1 a/cm³ = 1.000 ka/m³ : 1 MPa = 1 N/mm² : 1 kV/mm = 1 MV/m.

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