

PRELIMINARY DATA SHEET

Witcom HDPE-AS-S-UV, based on High Density Polyethylene (HDPE)

permanently anti-static, ATEX conform, UV-stabilised

Properties	Test methods	Units	HDPE-AS-S-UV
Physical properties			
Specific gravity	ISO 1183	g/cm ³	0,99
Water absorption at saturation, 23 °C	ISO 62	%	-
Humidity absorption, 23 °C/50 % r.h.	ISO 62	%	-
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	1,5 - 2,5
Mechanical properties			
Tensile strength (max.)	ISO 527	MPa	15
Elongation at break	ISO 527	%	>400
Flexural strength	ISO 178	MPa	18
Flexural modulus	ISO 178	GPa	0,8
IZOD impact strength, notched	ISO 180/1eA	kJ/m ²	50
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m ²	no break
Thermal properties			
Heat distortion temperature (1,81 MPa)	ISO 75	°C	-
Relative temperature index, 3 mm, with impact	UL 746B	°C	-
Coefficient of linear thermal expansion	ISO 11359	K-1·10 ⁻⁵	-
Flammability			
Burning behaviour	ISO 1210	-	HB @ 3,0 mm
UL-listing	UL94	-	-
Electrical properties			
Surface resistivity	ASTM D257	Ω/sq	< 10 ⁹
Comparative tracking index	IEC 60112	V	-
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	-
Processing conditions (injection moulding)			
Drying conditions (dehumidifying drier)	: 4 Hours @ 80 °C		
Maximum allowable moisture content	: 0,05 %		
Melt temperature	: 180 - 240 °C		
Mould temperature	: 20 - 60 °C		
Screw speed	: 0,1 - 0,25 m/s		
Back pressure	: 0 - 1,0 MPa		
Injection pressure	: Keep to a minimum		
Injection speed	: Fast ram speed		
Hold pressure	: Keep to a minimum		

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