Technical data sheet

RavaSafe® ZH-LSF 33 UV BK

***RavaSafe® ZH-LSF 33 UV BK** is a thermoplastic zero halogen, low smoke flame retardant compound designed for high flame retardancy sheathing applications to target the most fire challenging requirements.*

This solution combines easy process, good mechanical properties and a robust and cohesive char formation during fire with UV stabilization and colored in Black RAL 9005.

Typical Application: Telecom, Low and Medium power cable application

Standard norms (type of material) : EN 50363 (TM7), VDE 0207 / 0250 (HM2, HM4), BS 7655 (LTS 2), IEC 60502 (ST8) and IEC 60092-360 (SHF1)

Technical properties:

Physical and Mechanical Properties	Typical Value	Units (SI)	Test Method
Density, 23°C	1,56	g/cm³	ISO 1183-1 (ASTM D792)
Melt flow index (150°C /21,6kg)	3	g/10 min	ISO 1133 (b)
Hardness (15 seconds)	48	Shore D	ISO R 868 (ASTM D2240)
Water immersion test (24h @ 70°C)	0,75	mg/cm²	IEC 60811-402
Tear strength 23ºC	5,2	N/mm	BS 6469-99.1
Unaged mechanical properties (200 mm/min)			
Tensile strength	11	MPa	IEC 60811-501
Elongation at break	160	%	
Thermal ageing 7 days at 120°C			
Tensile strength variation (Δ)	2	%	IEC 60811-501
Elongation at break variation (Δ)	-16	%	
Thermal Mechanical Properties			
Hot Pressure Deformation (6h @ 90°C)	< 50	%	IEC 60811-508
Elongation at break (-40ºC)	> 20	%	IEC60811-505

Flammability	Typical Value	Units (SI)	Test Method
Oxygen Index	42	%	ISO 4589-2 (ASTM D2863) IEC 60754-1
Halogen content	< 0,5	%	
Acid gas emission			
pH	> 4,3	/	IEC 60754-2
Conductivity	< 2,5	µS/mm	IEC 60754-1

Recommended extrusion profile:

Extrusion Temperatures	Zones							
	Z1	Z2	Z3	Z4	Z5	Collar	Head	Die
Temperature (Imperial)	266°F	284°F	302°F	320°F	320°F	329°F	338°F	338°F
Temperature (SI)	130°C	140°C	150°C	160°C	160°C	165°C	170°C	170°C

RavaSafe® ZH-LSF 33 UV BK *is a product able to run on standard extruders, based on low compression screw and head. This compound is supplied in aluminium foil bags. Pre-drying is not required before extrusion process.*