





Halogen-free, thermoplastic, highly flame retardant sheathing compound for low and medium voltage cables

<p>■ Compound class Sheathing</p>	<p>■ Compound category TP</p>	<p>■ Flame retardant ATH / MDH</p>
<p>■ Standards VDE 0207 part 24 HM 2, HM 4 IEC 60092-360 SHF 1</p>	<p>BS 7655 section 6.1 LTS 1 - LTS 4 DIN VDE 0276-604 HM4</p>	<p>DIN EN 50363-8 TM7 VDE 0250 part 215 HM5</p>
<p>■ Operating temperature [C°] -30 to 90°C</p>	<p>■ Oil resistance level ★</p>	
<p>■ Typical applications <i>Halogen-free, low smoke, thermoplastic, highly flame retardant compound for the sheathing of low and medium voltage cables in General Installations applications. This compound features a high line speed and good processability.</i></p>  <p>Installation</p>		
<p>■ Features</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Flame retardant</p> </div> <div style="text-align: center;">  <p>Halogen-free</p> </div> <div style="text-align: center;">  <p>Low smoke</p> </div> </div>		

PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm ³	1.33	DIN EN ISO 1183-1A
Hardness*	Shore D	49	DIN ISO 48-4
Melt Flow Index (150°C; 21,6kg)	g/10 min	10	DIN EN ISO 1133

MECHANICAL PROPERTIES**

Thermoplastic	Unit	Typical value	Test method
Tensile strength	N/mm ²	> 15.0	IEC 60811-501
Elongation at break	%	> 550	IEC 60811-501
Tear strength	N/mm	18.0	BS 6469:99.1
After ageing in air oven 168h at 100°C ***	Unit	Typical value	Test method
Variation in tensile strength	%	-13.6	IEC 60811-401
Variation in elongation at break	%	-10.0	IEC 60811-401

■ After ageing in air oven 168h at 110°C ***	Unit	Typical value	Test method
Variation in tensile strength	%	-5.8	IEC 60811-401
Variation in elongation at break	%	-6.1	IEC 60811-401

THERMAL PROPERTIES **

■ Low temperature tests	Unit	Typical value	Test method
Elongation at break at -30°C	%	330	IEC 60811-505
■ Heat tests	Unit	Typical value	Test method
Hot pressure test: penetration 6h at 90°C	%	3	IEC 60811-508
Heat shock 1h at 150°C	%	Pass	IEC 60811-509

RESISTANCE **

■ Fluid IRM 902 4h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	-1.3	IEC 60811-404
Variation in elongation at break	%	-1.0	IEC 60811-404
Variation in weight	%	3.0	IEC 60811-404
■ Water purified 168h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	-9.1	IEC 60811-404
Variation in elongation at break	%	-2.0	IEC 60811-404
Variation in weight	%	0	IEC 60811-404

BURNING PROPERTIES*

■ Main burning properties	Unit	Typical value	Test method
LOI	%	27	ASTM D 2863 A

* pressed plaques, 155°C / 5 min

** extruded tapes

PROCESSING GUIDE

■ **Extruder Type**

Standard extruders for elastomeric or thermoplastic materials.

■ **Screw configuration**

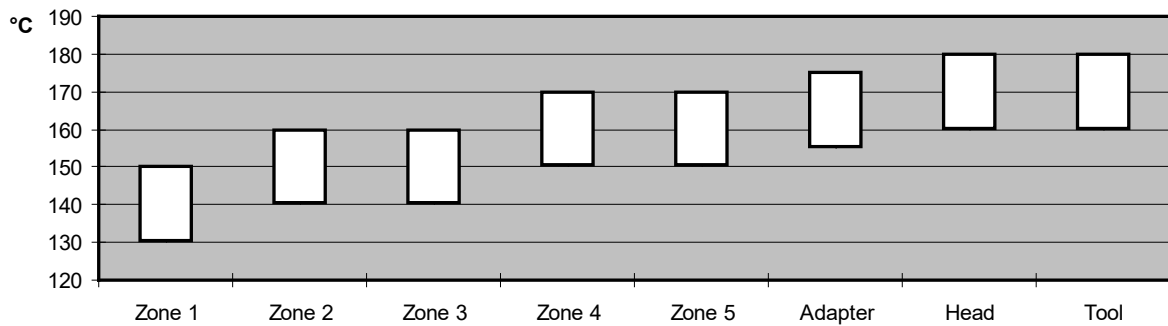
Low compression screw with L/D of 20 to 25 and compression ratio of 1:1.2

■ **Tooling**

Pressure, semi-compression or tube possible

■ **Temperature profile extruder**

The profile shown below may vary slightly depending on extruder type, head design & output.



■ **Maximum mass temperature**

180°C

■ **Drying**

Not necessary if the compound has been stored in original packing under cool (max. 30°C) and dry conditions. Mecoline compounds used from open packing require pre-drying during 4–6 hours at 60–70°C.

STORAGE INFORMATION

■ **Form & packaging**

Pellets in sizes 2.8mm
Moisture-resistant bags (25kg) & octabins (alu-innerliner, max. 1250kg)

■ **Shelf life**

1 year after date of manufacturing

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