


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




<p>■ Compound class insulation/sheathing</p>	<p>■ Compound category TP</p>	<p>■ Flame retardant ATH</p>
<p>■ Standards VDE 0207 part 24 HM 2</p>	<p>DIN EN 50525-3-11 TM 7</p>	<p>DIN EN 50363-8 TM7</p>
<p>■ Operating temperature [°C] -40 to 80</p>	<p>■ Oil resistance level ★</p>	

■ **Typical applications**
Halogen-free, low smoke, thermoplastic and flame retardant compound for sheathing of low and medium voltage cables in General Installation applications.



General Installation

■ **Features**

 Flame retardant	 Halogen-free	 Low smoke
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PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm ³	1.54	DIN EN ISO 1183-1A
Hardness*	Shore D	41	DIN ISO 48-4
Melt Flow Index (190°C; 21,6kg)	g/10 min	6.0	DIN EN ISO 1133

MECHANICAL PROPERTIES **

Thermoplastic	Unit	Typical value	Test method
Tensile strength	N/mm ²	10	IEC 60811-501
Elongation at break	%	205	IEC 60811-501

THERMAL PROPERTIES **

Low temperature tests	Unit	Typical value	Test method
Elongation at break at -40°C	%	60	IEC 60811-505
Heat tests	Unit	Typical value	Test method
Hot pressure test: penetration 6h at 80°C	%	36	IEC 60811-508

RESISTANCE **

■ Fluid IRM 902 4h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	- 28.4	IEC 60811-404
Variation in elongation at break	%	-1.5	IEC 60811-404
Variation in weight	%	13.0	IEC 60811-404

BURNING PROPERTIES *

■ Main burning properties	Unit	Typical value	Test method
LOI	%	39	ASTM D 2863 A

* pressed plaques, 155°C / 5 min.

** extruded tapes

PROCESSING GUIDE

■ **Extruder Type**

Standard extruders for elastomeric or thermoplastic processing.

■ **Screw configuration**

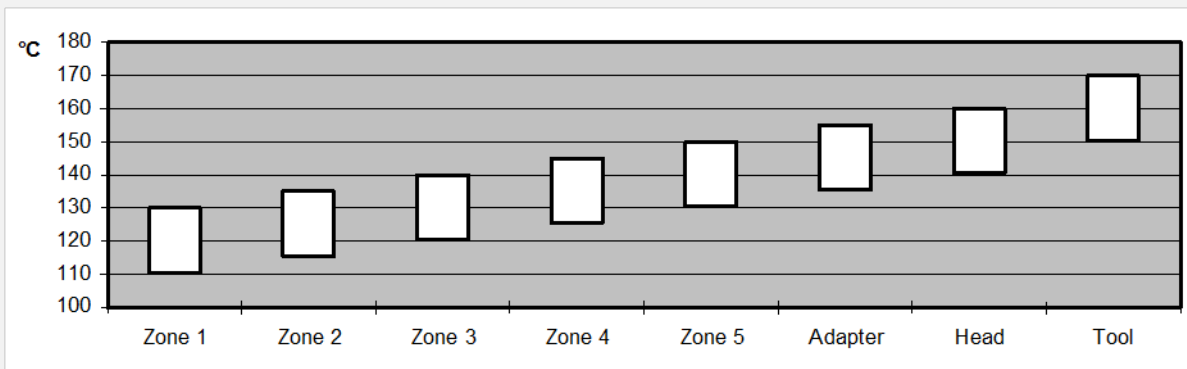
Low compression screw with L/D of 20 to 25 and compression ratio of 1:1.2

■ **Tooling**

For insulation pressure tools, for jacketing tube tools are recommended.

■ **Temperature profile extruder**

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



■ **Maximum mass temperature**

165 – 175°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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