



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

<p>■ <b>Compound class</b> Sheathing</p>	<p>■ <b>Compound category</b> <b>TP</b></p>	<p>■ <b>Flame retardant</b> ATH</p>
<p>■ <b>Standards</b> BS 7655 LTS 1 &amp; LTS 3 IEC 60092-360 SHF 1</p>	<p>VDE 0207 part 24 HM 2</p>	<p>VDE 0250 part 215 HM 5</p>
<p>■ <b>Operating temperature [C°]</b> -30 to 80</p>	<p>■ <b>Oil resistance level</b> ★</p>	

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




General Installation




Telecomm., Optical Fibre, Coaxial


■ **Features**



Flame retardant



Halogen-free



Low smoke

## PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm <sup>3</sup>	<b>1,50</b>	DIN EN ISO 1183-1A
Hardness*	Shore D	<b>49</b>	DIN ISO 48-4
Melt Flow Index (150°C; 21,6kg)	g/10 min	<b>10,1</b>	DIN EN ISO 1133

## MECHANICAL PROPERTIES \*\*

Thermoplastic	Unit	Typical value	Test method
Tensile strength	N/mm <sup>2</sup>	<b>11,0</b>	IEC 60811-501
Elongation at break	%	<b>191</b>	IEC 60811-501
After ageing in air oven 168h at 100°C **	Unit	Typical value	Test method
Variation in tensile strength	%	<b>-1,0</b>	IEC 60811-401
Variation in elongation at break	%	<b>-19,1</b>	IEC 60811-401

## THERMAL PROPERTIES \*\*

■ Heat tests	Unit	Typical value	Test method
Hot pressure test: penetration 6h at 80°C	%	<b>13</b>	IEC 60811-508

## BURNING PROPERTIES \*

■ Main burning properties	Unit	Typical value	Test method
LOI	%	<b>46</b>	ASTM D 2863 A
■ Acid gas emission	Unit	Typical value	Test method
Corrosivity: pH	-	<b>6.05</b>	DIN EN 60754-2
Conductivity	μS/mm	<b>0.49</b>	DIN EN 60754-2

\* pressed plaques, 155°C / 5 min.

\*\* extruded tapes

## PROCESSING GUIDE

■ **Extruder Type**

Standard extruders for elastomeric or thermoplastic processing.

■ **Screw configuration**

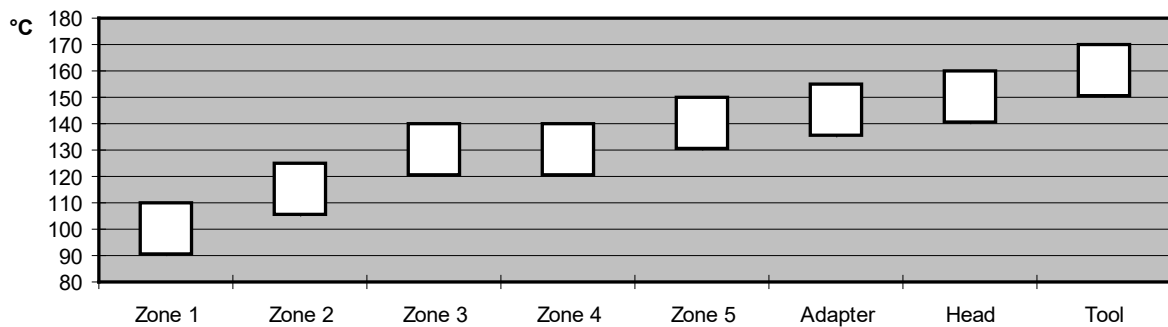
Low compression screw with L/D of 20 to 25 and compression ratio of 1:1.2

■ **Tooling**

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**

160 – 170°C

■ **Drying**

Predrying of Mecoline Compounds is normally not necessary provided the compound has been stored in sealed bags under cool (max. 30°C) and dry conditions.

If Mecoline Compounds are used from open bags, predrying 4–6h at a temperature of 60–70°C is recommended.

## STORAGE INFORMATION

■ **Form & packaging**

Pellets in sizes 2.8mm & 5.5mm  
Moisture-resistant bags (25kg) & octabins (alu-innerliner, max. 1250kg)

■ **Shelf life**

1 year after production

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