


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

<b>■ Compound class</b> Sheathing	<b>■ Compound category</b> 	<b>■ Flame retardant</b> ATH
<b>■ Standards</b> BS 6724  DIN EN 50363-8 TM7 IEC 60092-360 SHF 1 VDE 0250 part 215 HM5	BS 7655 section 6.1 LTS 1, LTS 2, LTS 3, LTS 4  DIN VDE 0276-604 HM4 NF C 32-323 DIN VDE 0276-620	CEI 20-11 M1  DIN VDE 0281 part 14 TM7 VDE 0207 part 24 HM 2, HM 4

### ■ Typical applications

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



Installation

### ■ Features



Flame retardant



Halogen-free



Low smoke



Tear resistant



Abrasion resistant

## PHYSICAL PROPERTIES

■ Physical properties	Unit	Typical value	Test method
Density*	g/cm <sup>3</sup>	<b>1,51</b>	DIN EN ISO 1183-1A
Hardness*	Shore D	<b>50</b>	DIN ISO 7619-1
Melt Flow Index (150°C; 21,6kg)	g/10 min	<b>10</b>	DIN EN ISO 1133

## MECHANICAL PROPERTIES

■ Thermoplastic **	Unit	Typical value	Test method
Tensile strength	N/mm <sup>2</sup>	<b>12</b>	IEC 608011-501
Elongation at break	%	<b>200</b>	IEC 608011-501
Tear strength	N/mm	<b>12,5</b>	BS 6469:99.1
■ After ageing in air oven 168h at 100°C ***	Unit	Typical value	Test method
Variation in tensile strength	%	<b>16,8</b>	IEC 608011-401
Variation in elongation at break	%	<b>-5</b>	IEC 608011-401

## THERMAL PROPERTIES \*\*

■ Heat tests	Unit	Typical value	Test method
Hot pressure test: penetration 6h at 80°C	%	<b>17</b>	IEC 608011-508
Hot pressure test: penetration 6h at 90°C	%	<b>28</b>	IEC 608011-508

## RESISTANCE \*\*

■ Fluid IRM 902 4h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	<b>-26</b>	IEC 608011-404
Variation in elongation at break	%	<b>13</b>	IEC 608011-404
Variation in weight	%	<b>6</b>	IEC 608011-404
■ Water purified 168h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	<b>-3,5</b>	IEC 608011-404
Variation in elongation at break	%	<b>-16,2</b>	IEC 608011-404
Variation in weight	%	<b>1,0</b>	IEC 608011-404

## BURNING PROPERTIES \*

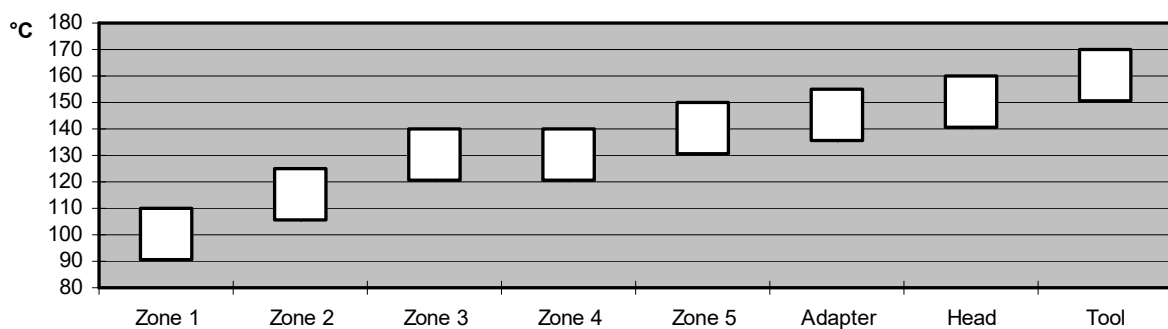
■ Main burning properties	Unit	Typical value	Test method
LOI	%	<b>32</b>	ASTM D 2863 A

\* 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** 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** 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 & 5.5mm  
Moisture-resistant bags (25kg) & octabins (alu-innerliner, max. 1250kg)
- **Shelf life** 1 year after production

Note: The information given in this datasheet is believed to be accurate and reliable. However, no warranty, express or implied, or guarantee is given as to the suitability, accuracy, reliability or completeness of the information. This information does not hold us liable for damages or penalties resulting from following our suggestions or recommendations.

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