


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





<p>■ Compound class sheathing</p>	<p>■ Compound category TP</p>	<p>■ Flame retardant ATH</p>
<p>■ Standards BS 7655 section 6.1 LTS1 - LTS4 DIN EN 50363-8 TM7</p>	<p>VDE 0207 part 24 HM 2, HM 4</p>	<p>IEC 60092-360 SHF 1</p>
<p>■ Operating temperature [°C] -40 to 90</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
 Tear resistant		

PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm ³	1.50	DIN EN ISO 1183-1A
Hardness*	Shore D	48	DIN ISO 7619-1
Melt Flow Index (150°C; 21,6kg)	g/10 min	3.8	DIN EN ISO 1133

MECHANICAL PROPERTIES **

Thermoplastic	Unit	Typical value	Test method
Tensile strength	N/mm ²	13.1	IEC 60811-501
Elongation at break	%	229	IEC 60811-501
Tear strength @ 23°C	N/mm	11.5	BS 6469:99.1
Tear strength @ 50°C	N/mm	6.9	BS 6469:99.1
Tear strength @ 60°C	N/mm	2.7	BS 6469:99.1

After ageing in air oven 168h at 100°C	Unit	Typical value	Test method



Variation in tensile strength	%	13.5	IEC 60811-401
Variation in elongation at break	%	- 18	IEC 60811-401

THERMAL PROPERTIES **

■ Low temperature tests	Unit	Typical value	Test method
Elongation at break at -40°C	%	> 30	IEC 60811-505
■ Heat tests	Unit	Typical value	Test method
Hot pressure test: penetration 6h at 90°C	%	20	IEC 60811-508

RESISTANCE **

■ Purified water 168h at 70°C	Unit	Typical value	Test method
Variation in tensile strength	%	-1	IEC 60811-404
Variation in elongation at break	%	-15	IEC 60811-404
Variation in weight	%	1	IEC 60811-404

BURNING PROPERTIES *

■ Main burning properties	Unit	Typical value	Test method
LOI	%	38	ASTM D 2863 A

Technical data sheet

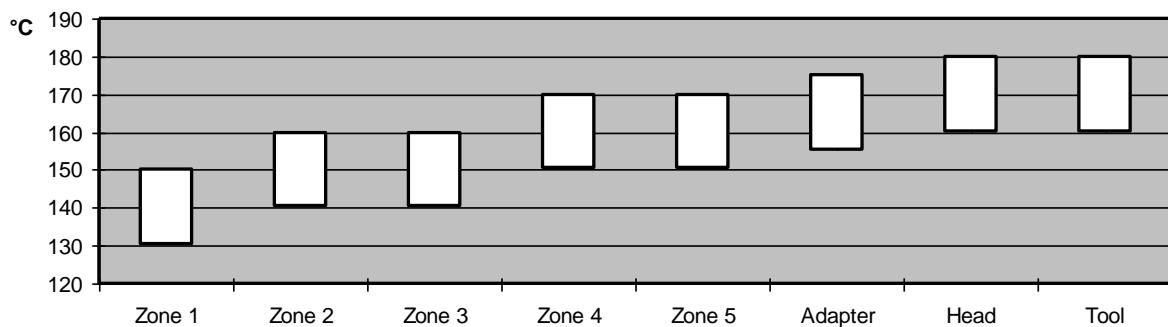
Mecoline S TP 1045 F



- * 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** 170 – 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

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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