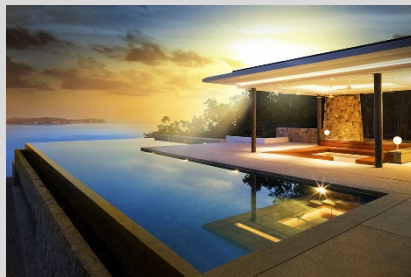


**FM** for XLPE/HFFR **Flame-retardant bedding compound for XLPE insulation and HFFR sheathing.**

<p>■ <b>Compound class</b> Bedding compound</p> <p>■ <b>Application examples: Insulation</b> 2 XI 1           XLPE 2 YI 1 - 5       PE 9 YI 1           PP</p> <p>■ <b>Application examples: Sheathing</b> HM 4 – 2       HFFR 2 YM 3         HDPE</p>	<p>■ <b>Based on</b> TPE-O</p> <p>acc. DIN / VDE 0207 part 22 acc. DIN / VDE 0207 part 2 acc. DIN / VDE 0207 part 7</p> <p>acc. DIN / VDE 0207 part 24 acc. DIN / VDE 0207 part 3</p>	<p>■ <b>Characteristics</b> Halogen-free flame retardant</p>
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■ **Typical applications**  
*Bedding compound for cables and wire according to VDE 0472 part 814 and BS 6724 with max. 90°C operating temperature at conductor.*



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■ **Features**



For 2-step process (coilable)



Flame retardant



Halogen-free

## PHYSICAL PROPERTIES

■ Physical properties	Unit	Typical value	Test method
Density*	g/cm <sup>3</sup>	<b>1,59</b>	DIN EN ISO 1183-1A
Hardness*	Shore D	<b>38</b>	DIN ISO 48-4
Mooney viscosity, ML (1+4) 100°C	MU	<b>30</b>	DIN ISO 289-1

## MECHANICAL PROPERTIES

■ Thermoplastic *	Unit	Typical value	Test method
Tensile strength	N/mm <sup>2</sup>	<b>4,5</b>	IEC 60811- 501
Elongation at break	%	<b>250</b>	IEC 60811- 501

## ELECTRICAL PROPERTIES \*

■ Major electrical properties	Unit	Typical value	Test method
Volume resistivity (at 27°C)	Ω cm	≥ 10 <sup>10</sup>	VDE 0472 Part 503
Surface resistivity (at 23°C)	Ω	≥ 10 <sup>9</sup>	VDE 0472 Part 502

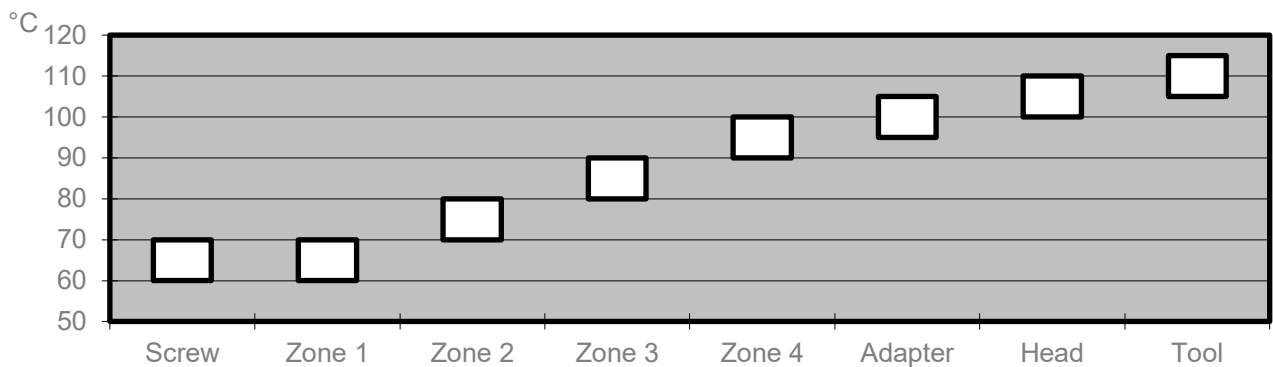
## BURNING PROPERTIES \*

■ Main burning properties	Unit	Typical value	Test method
LOI	%	30	ASTM D 2863 A
■ Acid gas emission	Unit	Typical value	Test method
pH (min.)	-	≥ 4,3	IEC 60754-2
Conductivity (max.)	μS cm-1	≤ 100	IEC 60754-2

\* pressed plaques, 100°C / 5 min.

## PROCESSING GUIDE

<b>■ Extruder type</b>	Standard extruders for elastomeric or thermoplastic processing
<b>■ Screw configuration</b>	Low compression screw with L/D of 12 to 25
<b>■ Tooling</b>	semi-compression or tube
<b>■ Temperature profile extruder</b>	The profile shown below may vary slightly depending on extruder type, head design & output.



<b>■ Maximum mass temperature</b>	105-115°C
<b>■ Drying</b>	Pre-drying of Melos FM Bedding Compounds is normally not necessary provided that the compound has been stored in the original sealed bags under cool (max. 30°C) and dry conditions.

## STORAGE INFORMATION

<b>■ Form &amp; packaging</b>	Pellets in sizes 5.5mm & 7.5mm PE-bags (25 kg), Octabins (1.000-2.000 kg), BigBags (max. 1.250 kg)
<b>■ Shelf life</b>	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.