













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

<p>■ Compound class Bedding compound</p> <p>■ Application examples: Insulation</p> <table border="0"> <tr><td>2 XI 1</td><td>XLPE</td><td>acc. DIN / VDE 0207 part 22</td></tr> <tr><td>2 YI 1 - 5</td><td>PE</td><td>acc. DIN / VDE 0207 part 2</td></tr> <tr><td>9 YI 1</td><td>PP</td><td>acc. DIN / VDE 0207 part 7</td></tr> <tr><td>3 GI 3</td><td>EPR</td><td>acc. DIN / VDE 0207 part 20</td></tr> </table> <p>■ Application examples: Sheathing</p> <table border="0"> <tr><td>HM 4 – 2</td><td>HFFR</td><td>acc. DIN / VDE 0207 part 24</td></tr> <tr><td>2 YM 3</td><td>HDPE</td><td>acc. DIN / VDE 0207 part 3</td></tr> </table>	2 XI 1	XLPE	acc. DIN / VDE 0207 part 22	2 YI 1 - 5	PE	acc. DIN / VDE 0207 part 2	9 YI 1	PP	acc. DIN / VDE 0207 part 7	3 GI 3	EPR	acc. DIN / VDE 0207 part 20	HM 4 – 2	HFFR	acc. DIN / VDE 0207 part 24	2 YM 3	HDPE	acc. DIN / VDE 0207 part 3	<p>■ Based on TPE-O</p>	<p>■ Characteristics Halogen-free flame retardant</p>
2 XI 1	XLPE	acc. DIN / VDE 0207 part 22																		
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HM 4 – 2	HFFR	acc. DIN / VDE 0207 part 24																		
2 YM 3	HDPE	acc. DIN / VDE 0207 part 3																		
<p>■ Typical applications <i>Bedding compound for cables and wire with max. 90°C operating temperature at conductor.</i></p>																				
 Home	 City	 Industry																		
<p>■ Features</p> <table border="0"> <tr> <td style="text-align: center;">  For 2-step process (coilable) </td> <td style="text-align: center;">  Flame retardant </td> <td style="text-align: center;">  Halogen-free </td> </tr> </table>			 For 2-step process (coilable)	 Flame retardant	 Halogen-free															
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PHYSICAL PROPERTIES

Physical properties	Unit	Typical value	Test method
Density*	g/cm ³	1,81	DIN EN ISO 1183-1A
Hardness*	Shore A	75	DIN ISO 7619-1
Mooney viscosity, ML (1+4) 100°C	MU	45	DIN 53 523

MECHANICAL PROPERTIES

Thermoplastic *	Unit	Typical value	Test method
Tensile strength	N/mm ²	1,5	IEC 811-1-1
Elongation at break	%	20	IEC 811-1-1



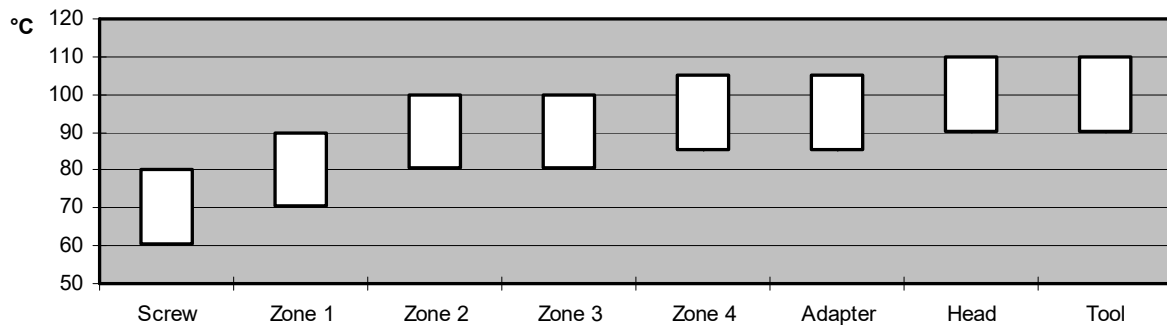
BURNING PROPERTIES *

■ Main burning properties			
	Unit	Typical value	Test method
LOI	%	67	ASTM D 2863 A
■ Acid gas emission			
	Unit	Typical value	Test method
pH (min.)	-	≥ 4,3	DIN VDE 0472- 813
Conductivity (max.)	μS cm-1	≤ 100	

* pressed plaques, 100°C / 5 min.

PROCESSING GUIDE

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



- **Maximum mass temperature** 110 – 115°C
- **Drying** 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

- **Form & packaging** Pellets in sizes 5.5mm & 7.5mm
PE-bags (25 kg), Octabins (1.000-2.000 kg), BigBags (max. 1.250 kg)
- **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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