



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

■ Compound class

Bedding compound

■ Application examples: Insulation

2 XI 1 XLPE
2 YI 1 - 5 PE
9 YI 1 PP

■ Application examples: Sheathing

HM 4-2 HFFR
2 YM 3 HDPE

■ Based on

TPE-O

acc. DIN / VDE 0207 part 22
acc. DIN / VDE 0207 part 2
acc. DIN / VDE 0207 part 7

acc. DIN / VDE 0207 part 24
acc. DIN / VDE 0207 part 3

■ Characteristics

Halogen-free flame retardant

■ Typical applications

Bedding compound for cables and wire with max. 90°C operating temperature at conductor.



Home



City



Industry

■ Features



For 2-step process (coilable)



Flame retardant



Halogen-free

PHYSICAL PROPERTIES

■ Physical properties

	Unit	Typical value	Test method
Density*	g/cm ³	1,66	DIN EN ISO 1183-1A
Hardness*	Shore D	30	DIN ISO 48-4
Mooney viscosity, ML (1+4) 100°C	MU	32	DIN ISO 289-1

MECHANICAL PROPERTIES

■ Thermoplastic *

	Unit	Typical value	Test method
Tensile strength	N/mm ²	≥ 3,0	IEC 60811-501
Elongation at break	%	≥ 300	IEC 60811-501

ELECTRICAL PROPERTIES *

■ Major electrical properties

	Unit	Typical value	Test method
Volume resistivity (at 27°C)	Ω cm	≥ 10¹⁰	VDE 0472 Part 503
Surface resistivity (at 23°C)	Ω	≥ 10⁹	VDE 0472 Part 502

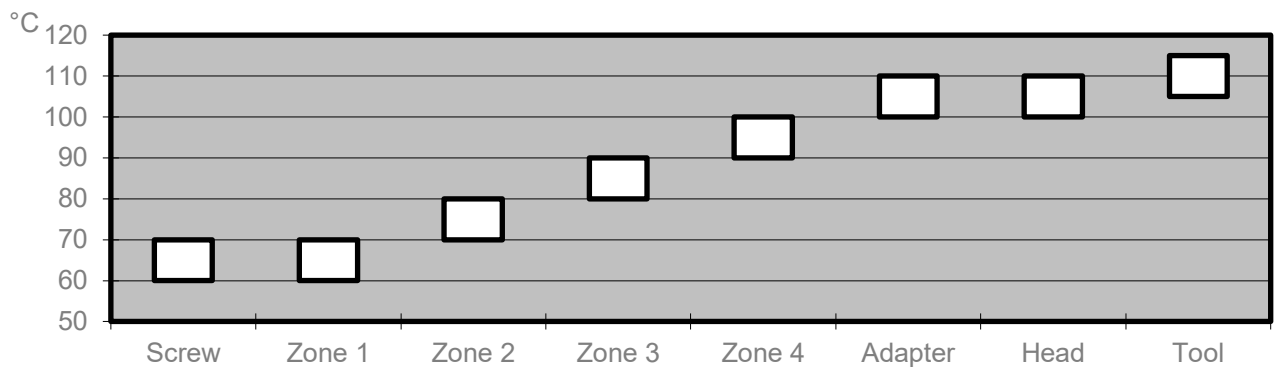
BURNING PROPERTIES *

■ Main burning properties	Unit	Typical value	Test method
LOI	%	25	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

■ 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	105 – 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

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