Technical data sheet

FM 1352

Special bedding compound.

■ Compound class	■ Based on	■ Characteristics
Bedding compound	TPE-O	Halogen-free flame retardant

■ Application examples: Insulation

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

■ Application examples: Sheathing

HM 4 – 2	HFFR	acc. DIN / VDE 0207 part 24
2 YM 3	HDPE	acc. DIN / VDE 0207 part 3

■ Typical applications

Bedding compound for cables and wire according to VDE 0472 part 814 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/cm³	**1,56**	DIN EN ISO 1183-1A
Hardness*	Shore D	**40**	DIN ISO 48-4
Mooney viscosity, ML (1+4) 100°C	MU	**35**	DIN ISO 289-1

MECHANICAL PROPERTIES

■ Thermoplastic *	Unit	Typical value	Test method
Tensile strength	N/mm²	**≥ 6,0**	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	**≥ 10^{10}**	VDE 0472 Part 503

Surface resistivity (at 23°C)	Ω	**≥ 10^9**	VDE 0472 Part 502

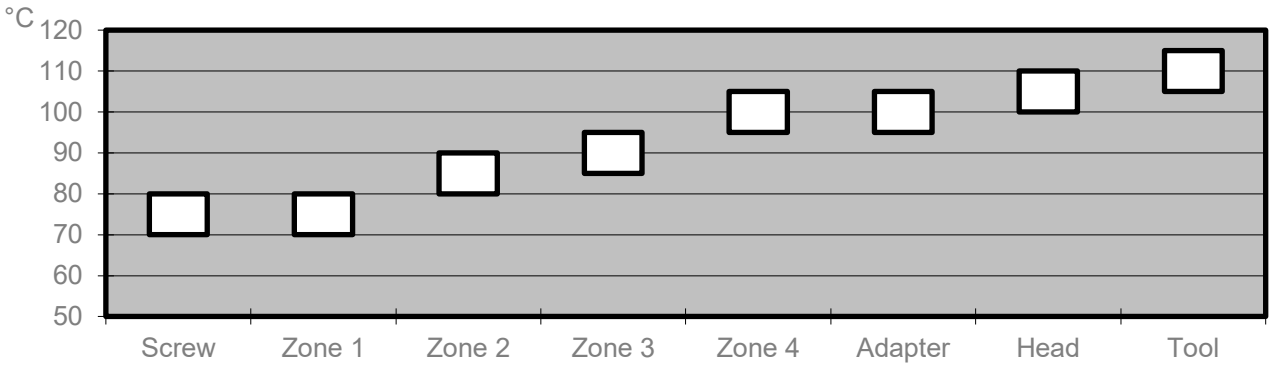
BURNING PROPERTIES *

■ Main burning properties	Unit	Typical value	Test method
LOI	%	**34**	ASTM D 2863 A
Temperature index	°C	**280**	ISO 4589-3
■ 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

FM 1352 TDS ENG rev05 *05.11.2020* SK