



melos

TP

Compound flyer

# MECOLINE S TP 1051 F

Halogen-free thermoplastic, flame retardant sheathing material. Highly flexible and durable (pully flexing test). Made for installation and wind energy cable. Suitable for low and medium voltage cables.



Highly flame retardant



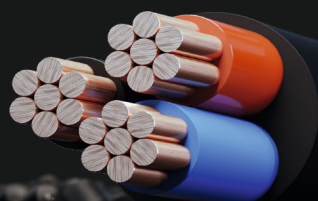
Low smoke, zero halogen



To fulfill high CPR classes



Highly flexible even at low temperatur (down to -40°C)



# MECOLINE S TP 1051 F

## Compound flyer

### Standards:

- + DIN EN 50363-8 TM7
- + IEC 60092-360 SHF1
- + IEC 60502-1 ST8

### Operating temperature [°C]:

-40 to 90

## PROPERTIES

	Unit	Typical value	Test method
Density	g/cm <sup>3</sup>	<b>1.59</b>	DIN EN ISO 1183-1A
Hardness	Shore A	<b>83</b>	DIN ISO 48-4
Mooney viscosity, ML (1+4) 160°C	MU	<b>46</b>	DIN EN ISO 1133
Tensile strength	MPa	<b>10.1</b>	IEC 60811-501
Elongation at break	%	<b>210</b>	IEC 60811-501
Elongation at break at -40°C	%	<b>43</b>	IEC 60811-501
Hot pressure test 6 h at 90°C	%	<b>10</b>	IEC 60811-508
LOI	%	<b>38</b>	ASTM D 2863 A
Toxicity index	–	<b>4.3</b>	EN 50305

### Acid gas emission

Corrosivity: pH (min.)	–	<b>6.75</b>	IEC 60754-2
Conductivity (max.)	µS/mm	<b>0.85</b>	IEC 60754-2
Amount of halogen acid gas	mg/g	<b>&lt;5</b>	IEC 60754-1

## BURNING TEST RESULTS

Criteria	Measured value	Evaluation criteria to reach class <b>B2ca-s1,d1</b>
<b>FS</b> Flame spread	1.35 m	≤ 1.50 m
<b>THR1200s</b> Total heat release	9.7 MJ	≤ 15 MJ
<b>HRRmax</b> Max. heat release rate	29 kW	≤ 30 kW
<b>FIGRA</b> Fire growth rate	73 W/s	≤ 150 W/s
<b>SPRmax</b> Max. smoke production rate	0.12 m <sup>2</sup> /s	≤ 0.25 m <sup>2</sup> /s
<b>TSP1200s</b> Total smoke production	36 m <sup>2</sup>	≤ 50 m <sup>2</sup>
<b>Burning droplets</b>	d1	none, no longer than 10 s

Tested construction: H05Z1Z1-F acc. to DIN EN 50525-3-11



- Sheathing compound  
**Mecoline S TP 1051 F**
- Insulation  
**Mecoline IS TP 1041 F**
- No bedding compound



**Class B2ca-s1,d1**  
according to DIN EN 50399

Note: The information given in this flyer 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.

