

A large wind turbine is shown inside a factory, with its three blades and central hub visible. The scene is dimly lit with a greenish-blue hue. The 'melos' logo is in the top right corner.

melos

A green square containing the white letters 'TP'.

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



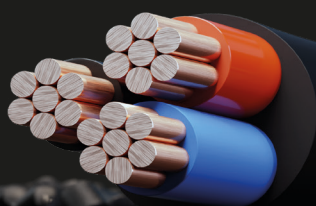
Low smoke, zero halogen



To fulfill high CPR classes



Highly flexible even at -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 ³	1.59	DIN EN ISO 1183-1A
Hardness	Shore A	83	DIN ISO 48-4
Mooney viscosity, ML (1+4) 160°C	MU	46	DIN EN ISO 1133
Tensile strength	MPa	10.1	IEC 60811-501
Elongation at break	%	210	IEC 60811-501
Elongation at break at -40°C	%	43	IEC 60811-501
Hot pressure test 6 h at 90°C	%	10	IEC 60811-508
LOI	%	38	ASTM D 2863 A
Toxicity index	—	4.3	EN 50305

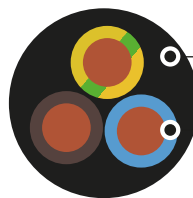
Acid gas emission

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

BURNING TEST RESULTS

Criteria	Measured value	Evaluation criteria to reach class B2ca-s1,d1
FS Flame spread	1.35 m	≤ 1.50 m
THR _{1200s} Total heat release	9.7 MJ	≤ 15 MJ
HRR _{max} Max. heat release rate	29 kW	≤ 30 kW
FIGRA Fire growth rate	73 W/s	≤ 150 W/s
SPR _{max} Max. smoke production rate	0.12 m ² /s	≤ 0.25 m ² /s
TSP _{1200s} Total smoke production	36 m ²	≤ 50 m ²
Burning droplets	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 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.

Melos GmbH | Bismarckstraße 4–10 | 49324 Melle, Germany
Tel.: +49 54 22 94 47-0 | E-Mail: info@melos-gmbh.com

www.melos-gmbh.com

