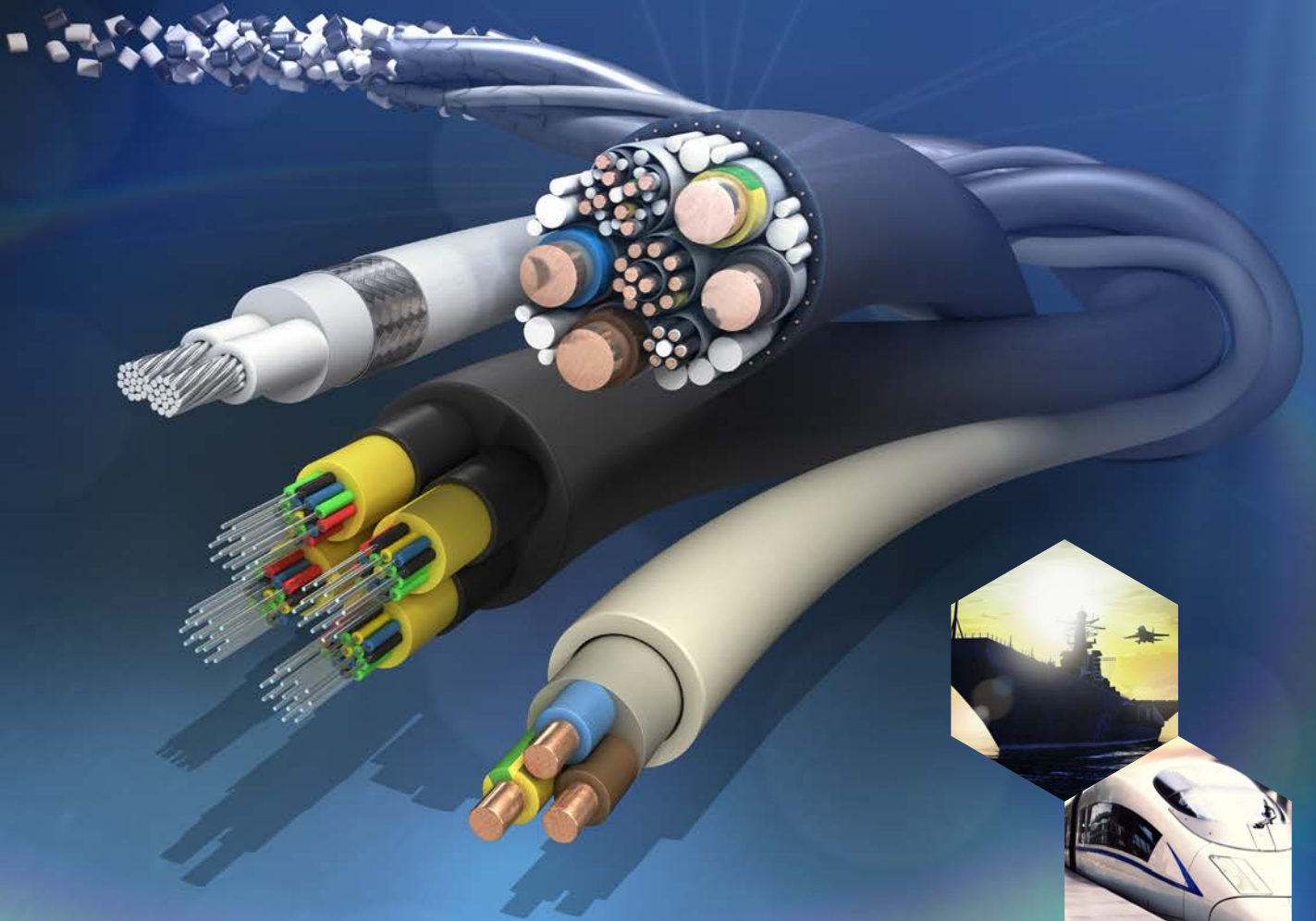


melos



FM

RDX

TP

MECOLINE

CABLE COMPOUNDS

Insulation, sheathing and bedding
compounds

CERT

Certificates of Melos GmbH

DIN EN ISO 9001 | Quality Management

DIN EN ISO 14001 | Environmental Management

DIN EN ISO 50001 | Energy Management

DIN ISO 45001 | Occupational Health and Safety Management



Melos is a leading manufacturer in the field of highest quality low smoke, HFFR, thermoplastic and irradiation cross-linkable compounds including halogenated specialties. We design formulations for a wide range of applications. Our up-to-date production lines enable us to make standard and customized compounds for our customers all over the world.

We cover with our insulation, bedding and sheathing compounds a wide range of international standards.

In addition, our „Customer Solutions“ division is responsible for the customized development of compounds for the plastics processing industry. With our modern production facilities, we can manufacture compounds to customer specifications.

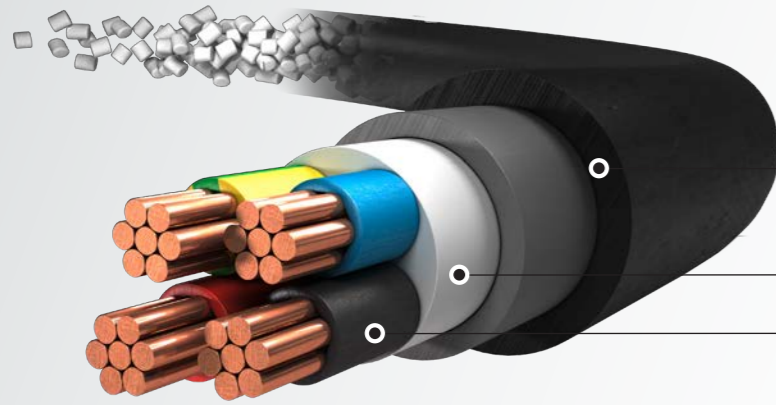
Our strengths

- + CPR flame retardant compounds for D upto B2 classification
- + „Help-Service“: individual customer service on-site for introducing new products and optimizing production processes
- + Long-term Thinking: continuous product development solving for future problems (secure data transport or public transportation)
- + State-of-the-art: new Competence Center
- + Setting standards for ensuring consistent high quality and cost-effective product solutions
- + Going global via our distribution network of appointed partners allows fast and direct communication
- + flexible logistics, high capacity and reliable delivery

Synergies with other product ranges

Granules for sport, customer solutions and custom compounds, as well as cable compounds are all falling within our competence. You will benefit from all these synergies, available within the MELOS group.





MECOLINE SHEATHING COMPOUNDS

FM BEDDING COMPOUNDS

MECOLINE INSULATION COMPOUNDS



MECOLINE: COMPOUND CODE EXPLANATION

MECOLINE

Brand name for insulation and sheathing compounds by Melos

I/S

Type: I: Insulation S: Sheathing

TP/RDX

Product group: TP: thermoplastic RDX: radiation cross-linkable

1, 2 OR 5

1/2 = halogen-free 5 = halogenated

0 TO 6

0/1 = thermoplastic 2/3 = radiation cross-linkable

01 TO 99

internal serial number

F

flame retardant

THERMOPLASTIC, HALOGEN-FREE INSULATION AND SHEATHING COMPOUNDS



Melos Code	Operating temperature [°C]	Shore hardness	Tensile strength [N/mm ²]	Elongation at break [%]	LOI [%]	Density [g/cm ³]	Viscosity MFI (g/10 mm) Mooney (MU)	Oil resistance level	Common basic features	Special features	Standards	Applications
Mecoline S TP 1005 F	-15 to 90	57 D	10,0	180	37	1,52	150°C/ 21,6 kg 3,5	★	flame retardant, low-smoke	very flame retardant, oil-resistant	HM2, HM4, HM5, TM7 BS 7655 LTS1 / LTS2 / LTS3 / LTS4 SHF1 CEI 20-11 M1, NF C 32-323	Rolling Stock, Telecomm.
Mecoline S TP 1006 F	-25 to 90	50 D	10,3	179	45	1,56	160°C/ 21,6 kg 5,0	★★	flame retardant	very flame retardant	HM2, HM4, HM5, TM7 BS 6724, BS 7655 LTS2 SHF1 CEI 20-11 M1, NF C 32-323	Installation, Telecomm.
Mecoline S TP 1007 F	-25 to 90	54 D	11,2	180	34	1,52	150°C/ 21,6 kg 11,1	★★	flame retardant	very flame retardant	HM2, HM4	Installation, Telecomm.
Mecoline S TP 1021 F	-30 to 80	48 D	10,8	226	42	1,48	150°C/ 21,6 kg 9,0	★	flame retardant	very flame retardant	HM2, HM5, TM7 BS 7655 LTS1 / LTS3 SHF1	Installation, Telecomm.
Mecoline S TP 1030 F	-70 to 105	87 A	11,2	305	38	1,63	(1+4) 160°C 62	★★★★★	oil-resistant, flexible, flex. at low temperature	oil-resistant, flexible, flex. at low temperature	HM2, HM4, HM5, TM7 SHF1 UL 1277 Oil Res I & II ST8	Green Energy, Shipboard
Mecoline IS TP 1032 F	-30 to 90	52 D	10,5	196	38	1,49	150°C/ 21,6 kg 8,2	★	flame retardant	very flame retardant	HM2, HM4, HM5, TM7, T16, T17 BS 7655 LTS1 / LTS2 / LTS3 / LTS4 SHF1 CEI 20-11 M1	Installation, Telecomm.
Mecoline IS TP 1033 F	-25 to 90	53 D	13,0	185	39	1,51	190°C/ 21,6 kg 12,8	★	Weather/UV-resistant	Weather/UV-resistant	HM2, HM4, HM5 SHF1	Installation, Shipboard
Mecoline S TP 1034 F	-75 to 105	88 A	15,0	200	40	1,60	(1+4) 160°C 71	★★★★★	oil-resistant, flexible, flex. at low temperature	oil-resistant, flexible, flex. at low temperature	HM2, HM4, HM5, TM7 SHF1 UL 1277 Oil Res I & II ST8	Green Energy, Shipboard
Mecoline IS TP 1035 F	-30 to 90	50 D	12,5	190	45	1,47	150°C/ 21,6 kg 9,9	★	flame retardant	very flame retardant	HM2, HM4, HM5, T16, T17, TM7 BS 6724, BS 7655 LTS2 SHF1	Installation, Telecomm.
Mecoline S TP 1039 F	-50 to 105	34 D	11,8	219	44	1,63	210°C/ 21,6 kg 3,6	★★★★★	oil-resistant, flexible, flex. at low temperature	oil-resistant, flexible, flex. at low temperature	HM2, HM4, HM5, TM7 SHF1 UL 1277 Oil Res I & II ST8	Telecomm., Shipboard
Mecoline IS TP 1041 F	-40 to 80	47 D	11,0	220	39	1,47	150°C/ 21,6 kg 8,5	★	flexible	flexible	HM2, HM5, T16, TM7 BS 7655 LTS1 / LTS2 SHF1	Installation
Mecoline IS TP 1043 F	-40 to 80	50 D	12,4	230	45	1,46	150°C/ 21,6 kg 5,7	★	flame retardant, flexible	very flame retardant, flexible	HM2, HM5, TM7, T16, T17 BS 7655 LTS1 / LTS3 SHF1	Installation
Mecoline S TP 1045 F	-40 to 90	48 D	13,1	229	38	1,50	150°C/ 21,6 kg 3,8	★	flame retardant, tear resistant	very flame retardant, tear resistant	HM2, HM4, TM7 BS 7655 LTS1 - LTS4 SHF1	Installation

RADIATION CROSS-LINKABLE, **HALOGEN-FREE**
INSULATION AND SHEATHING COMPOUNDS



Melos Code	Operating temperature [°C]	Shore hardness	Tensile strength [N/mm ²] -crosslinked-	Elongation at break [%] -crosslinked-	LOI [%]	Density [g/cm ³]	Viscosity MFI (g/10 min) Mooney (MU)	Oil resistance level	Common basic features	Special features	Standards	Application
Mecoline S RDX 1203 F	-25 to 105	50 D	14,3	173	34	1,48	150°C/ 21,6 kg	★	flame retardant, low-smoke, high temp.-resistant	oil-resistant	<ul style="list-style-type: none"> EN 50264 EM101-104 SHF2 NEK 606 	Offsh./Marine, Rolling Stock
Mecoline S RDX 1212 F	-50 to 125	87 A	11,1	272	28	1,51	165°C/ 21,6 kg	★	oil-resistant, flexible, flex. at low temperature	<ul style="list-style-type: none"> SHF2 NEK 606 	Offshore, Shipboard	
Mecoline S RDX 1215 F	-60 to 125	83 A	13,0	206	42	1,60	175°C/ 21,6 kg	★	oil-resistant, flexible, flex. at low temperature	<ul style="list-style-type: none"> EN 50264 EM101-104 SHF2 NEK 606 	Offshore/Ship, Rolling Stock	
Mecoline IS RDX 1251 F	-40 to 125	50 D	16,0	150	32	1,40	190°C/ 10,0 kg	★	oil-resistant, abrasion-resistant, flex. at low temperature	<ul style="list-style-type: none"> EN 50306-1 S2, HL 4-M EN 50306-2 EN 50306-4 	Rolling Stock	
Mecoline I RDX 1257 F	-40 to 125	49 D	12,0	180	36	1,47	170°C/ 21,6 kg	★	flexible, flex. at low temperature	<ul style="list-style-type: none"> EN 50264 EI 110 	Rolling Stock	
Mecoline S RDX 1261 F	-40 to 125	87 A	12,0	150	37	1,59	ML(1+4) 160°C	★	oil-resistant, flexible, flex. at low temperature	<ul style="list-style-type: none"> EN 50264 EM 101-104 IEC 60092-360 SHF2 	Marine, Aero, Rolling Stock	
Mecoline I RDX 1262 F	-40 to 125	34 D	14,0	500	31	1,36	160°C/ 10,0 kg	★	flexible, flex. at low temperature	<ul style="list-style-type: none"> CSA AWM I A/B UL 3266 UL 3271 	General Applications	
Mecoline IS RDX 1263 F	-40 to 120	43 D	12,0	250	31	1,37	150°C/ 21,6 kg	★		<ul style="list-style-type: none"> EN 50264 EI 105 & EI 110 EN 50363-5 EI 5 & EI 8 	Installation, Rolling Stock	
Mecoline I RDX 1266 F	-50 to 125	56 D	15,3	212	27	1,36	150°C/ 10,0 kg	★	oil-resistant, abrasion-resistant, flex. at low temperature	<ul style="list-style-type: none"> JASO D608 AESSXF JASO D608 AEXF 	Automotive	

RADIATION CROSS-LINKABLE, **HALOGENATED**
INSULATION AND SHEATHING COMPOUNDS



Melos Code	Operating temperature [°C]	Shore hardness	Tensile strength [N/mm ²] -crosslinked-	Elongation at break [%] -crosslinked-	LOI [%]	Density [g/cm ³]	Viscosity MFI (g/10 min) Mooney (MU)	Oil resistance level	Common basic features	Special features	Standards	Application
Mecoline I RDX 5233	-50 to 150	60 D	20,0	400	-	1,05	190°C/ 21,6 kg	★	flame retardant, high temp.-resistant	low-smoke, abrasion-resistant	<ul style="list-style-type: none"> NEMA WC 27500 SAE AS 81044/9 SAE AS 81044/11 SAE AS 81044/12 <p>Note: not flame retardant</p>	Marine, Aerospace, Defence
Mecoline I RDX 5233: Halogen-free product, but only applicable in combination with the halogenated Mecoline IS RDX 5241 F (see below)												
Mecoline IS RDX 5234 F	-50 to 150	50 D	17,0	330	27	1,20	190°C/ 5,0 kg	★	abrasion-resistant, oil-resistant, flex. at low temperature	<ul style="list-style-type: none"> CSA AWM I A/B CSA CL 1251, 1503 SAE J1128 GXL / SXL / TXL SAE J1127 SGX / STX UL 3289 / 3321 	Automotive, General Appl.	
Mecoline IS RDX 5239 F	-50 to 150	27 D	16,0	300	25	1,24	190°C/ 2,16 kg	★	low-smoke, flexible, flex. at low temperature	<ul style="list-style-type: none"> UL 3288 / 3289 / 3321 / 3398 	Automotive, General Appl.	
Mecoline IS RDX 5243 F	-50 to 150	28 D	19,0	400	28	1,30	190°C/ 2,16 kg	★	oil-resistant, abrasion-resistant, flex. at low temperature	<ul style="list-style-type: none"> VG 95218 part 24 / 25 / 27 / 28 	Automotive, Marine, Aero.	
Mecoline IS RDX 5258 F	-50 to 150	26 D	22,4	425	23	1,20	190°C/ 2,16 kg	★	oil-resistant, abrasion-resistant, flex. at low temperature	<ul style="list-style-type: none"> CSA AWM I A/B CSA CL 1251 / 1503 SAE J1127 SGX / STX UL 3289 / 3321 	Automotive, General Appl.	
Mecoline I RDX 5267 F	-55 to 150	51 D	16,0	380	27	1,19	190°C/ 10,0 kg	★	oil-resistant, abrasion-resistant	<ul style="list-style-type: none"> ISO 6722 T4 / class D SAE J1128 TXL / GXL / SXL 	Automotive, General Appl.	
Special compounds based on fluoropolymers, halogenated												
Mecoline IS RDX 5241 F	-50 to 150	73 D	30,0	150	42	1,75	150°C/ 21,6 kg	★	oil-resistant, abrasion-resistant, flex. at low temperature	<ul style="list-style-type: none"> NEMA WC 27500 SAE AS 81044/9 SAE AS 81044/11 SAE AS 81044/12 	PVDF, Offshore/Ship, Marine, Aero.	
Mecoline IS RDX 5244 F	-55 to 225	74 A	12,0	200	43	1,90	230°C/ 21,6 kg	★	oil-resistant, flexible, flex. at low temperature	<ul style="list-style-type: none"> ISO 6722-1 Class F 	Fluoroelastomer, Automotive, Marine, Aero.	



HALOGEN-FREE BEDDING COMPOUNDS



Melos code	Shore hardness	Mooney viscosity ML (1+4) 100°C	Density [g/cm³]	Coilable for 2-step-process	LOI [%]	Tensile strength [N/mm²]	Elongation at break [%]	Base polymer	Remarks & standards
PVC/PVC Migration stabilised bedding compounds for PVC insulation and PVC sheathing									
FM 0641	75 A	25	1,99					EPR	
FM 0700	90 A	15	2,01					POE	High line speed
FM 0600/1	77 A	18	1,88	■		1,0	30	EPR	
FM 976	70 A	27	1,88		35			EPR	Flame retardant
FM 908 BK	65 A	22	1,86					EPR	For Ceander cables
XLPE/PVC Bedding compounds for XLPE insulation and PVC sheathing									
FM 942	75 A	25	1,80	■				EPR	Temperature range -40°C to +60°C
FM 0553	87 A	25	1,92					TPE-O	
XLPE/HFFR Non flame-retardant bedding compounds for XLPE insulation and HFFR sheathing									
FM 1224	50 A	45	1,84	■		1,0	250	IIR	Also suitable in combination with TPU & XLPE for flexible applications
FM 1426/4	70 A	30	1,75	■		1,5	70	TPE-O/EPDM	Good mechanical properties
FM 1249	80 A	30	1,96			0,5	20	TPE-O	
XLPE/HFFR Flame-retardant bedding compounds for XLPE insulation and HFFR sheathing									
FM 1248	80 A	30	1,91		45			TPE-O	
FM 972	75 A	28	1,74		50	0,5	20	EPR	
FM 1239	70 A	30	1,87	■	55			TPE-O	
FM 0474/5	74 A	32	1,82		63			TPE-O	Very flame retardant
FM 0728	65 A	45	1,81	■	67	1,5	20	TPE-O	
Conductive Conductive bedding compounds									
FM 264 BK	80 A	35	1,52					EPR	PVC- & XLPE insulation
FM 303 BK	80 A	47	1,67	■				IIR	XLPE insulation
Special Special bedding compounds with high mechanical properties (also suitable as inner sheathing)									
FM 0527	36 D	35	1,61	■		5,0	600	TPE-O	TPU sheathing & XLPE insulation
FM 0526	35 D	35	1,60	■	34	4,0	300	TPE-O	TPU sheathing & XLPE insulation, flame retardant
FM 0463	30 D	32	1,66	■	25	3,0	300	TPE-O	Good mechanical properties, flame retardant
FM 0715	39 D	43	1,64	■	34	5,3	400	TPE-O	BS 6724, VDE 0472 part 814, flame retardant
FM 1353	89 A	45	1,65	■	40	4,0	200	TPE-O	Flame retardant

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or need professional
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Information in this publication is, to the best of our knowledge, true and accurate. However, since conditions under which our products may be used are beyond our control, recommendations are made without warranty or guarantee. Users are recommended to establish for themselves the suitability of our products in their cable construction. The above values should not be used for quality control purposes.

RELIABLE & EFFICIENT COMPOUNDING

With Melos at your side, you have an experienced and highly capably compounder upon whom you can rely. Whether by using bespoke starting products or by improving compound effectiveness – Melos guarantees unique solutions.

Our mixers produce a whole variety of different compounds to your specifications. Various rubbers and thermoplastics serve as base materials. Whether filled, coloured, converted into blends or finished with functional additives, the possibilities are endless. This allows us to produce exactly the right compound meeting all your requirements for your specific industrial application.



RECYCLING

We recycle Start- and End-production material like lumps, fines and other off-spec. The granulation of your production scrap for a re-use provides a cost-saving, eco-friendly and sustainable solution.

TOLL COMPOUNDING

We develop formulations for special compounds and master batches exactly as specified by the customer or operate as subcontractor to compound materials directly as formulated. We have the ideas with which to meet your requirements.



PRODUCTION TECHNOLOGIES

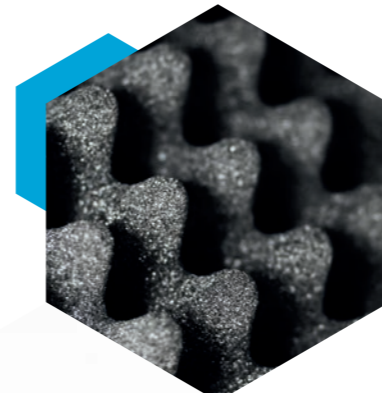
CO-KNEADERS



TWIN SCREW



INTERNAL MIXERS



You have questions or need professional support?



melos-compounding.com



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QUALITY**

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Do you have any questions?**

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