

TABOCAB° COMPOUNDS



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OUR SUCCESSFUL HISTORY MAKES US A LEADER TODAY





On the market since 1950

40 years of experience in compounding

100 000 t of production capacity





SILON designs, produces and sells polyolefinbased performance compounds for applications in the construction and automotive industries, for hygiene and general applications. The SILON global group supplies its products to more than 40 countries worldwide. Production plants are located in the Czech Republic and in the USA (Georgia). We have our own Research and development centre in the Czech Republic.

Our experts have extensive experience working in the contract compounding field, helping customers to develop, innovate and outsource new products.

SILON has successfully offered high-grade PE-Xb on the pipe and cable market under the TABOREX® brand name since 1994. Since 2017, when SILON invested in high-end Buss technology, it has been successfully supplying high-performance halogen-free (HFFR) and cross-linked polyethylene (XLPE) compounds to the market under its own TABOCAB® brand. SILON compounds are the best choice for the production of power, renewable, control, signal and communication cables, as well as automotive and e-mobility cables.

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TABOCAB® CABLE COMPOUNDS FOR

INSULATION AND SHEATHING



TABOCAB° cable compounds mainly cover solutions for low voltage applications suitable for construction, automotive, railway, renewable and industrial cables. Our portfolio includes Sioplas cross-linkable compounds (XLPE), thermoplastic and cross-linkable HFFR compounds (LSFO/HFFR; XL-HFFR) as well as stabilisation packages and catalyst masterbatches.

HFFR

- Excellent fire retardancy performance
- Easy processability
- Customised products
- TPO solutions available
- Produced on high-end Buss technology

XLPE

- Excellent dielectric properties
- Easy process and high-speed production
- Balance of physical and barrier performance
- Lower compound weight
- Suitable for thin-wall applications

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GIVE YOUR CABLES NEW ENERGY



ADVANTAGES of XLPE and HFFR TABOCAB Cable Compounds

XLPE provides a very low loss factor, a low dielectric constant and excellent insulation properties.

 XLPE has a high dielectric strength in combination with superior low-temperature flexibility.

suitable for —————automotive and railway applications

XLPE allows service temperatures up to 125°C and short-term maximum peak temperatures above 200°C without the danger of hydrochloric acid being released, as is the case in PVC.

suitable for solar cables

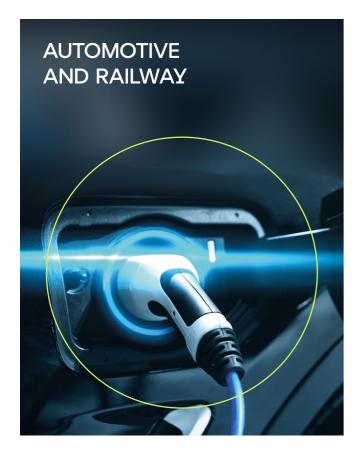
XLPE shows generally good chemical resistance to acids, organics and mineral oils. Due to its low water uptake, XLPE does not show the treeing effect like polar polymers.

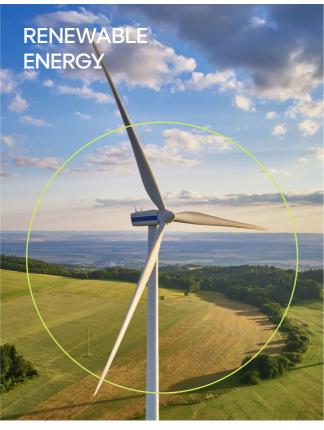
 XLPE, in combination with LSFOH/HFFR jacketing, can be used in safety cable applications. LSFOH/HFFR materials have the same performance as standard halogenated materials without showing smoke, high toxicity or corrosiveness of fumes. These factors are the most critical, as lives can be saved in case of fire.

suitable for ———

safety cable applications across fields

APPLICATIONS





SILON's activities cover solutions for upcoming cable products and comply with the current standards and requirements of ISO 6722 in automotive under-the-hood applications and EN 45545 in railway cabin and safety applications.

The TABOCAB® product portfolio in this segment is suitable for:

AUTOMOTIVE

- single-core/multi core T3 cables
- LSF0H/HFFR cables

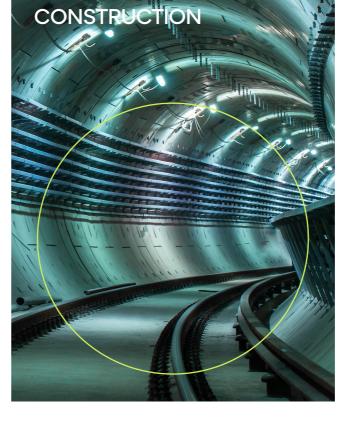
RAILWAY

• LV power, signalling, communication for vehicles, tunnels and ground

For this sector, SILON can offer XLPE insulation and the XL-HFFR jacket compound, both ambient-cured and designed for photovoltaic and grid connection cables of up to 1,5 kV, with a service temperature of -40 - +90°C and extended service life (20 000 h at 120°C).

These products conform to:

- EN 50618
- IEC 62930
- EN 60332-1-2





SILON offers a unique package combination of easy process moisture-cured XL-HFFR insulation and sheathing of TPO-based compounds specifically designed for LSF0H/HFFR low-voltage power cables up to 1 kV and operating temperatures up to 90°C.

Our solutions comply with the VDE, EN, BS, IEC standards.

TABOCAB® cable compounds are designed to provide excellent service and long-term reliability and resistance to industrial and environmental abuse, including extreme temperatures, abrasion, impacts, tension, flexing or chemicals.

TABOCAB® compounds can be used in:

- instrumentation cables
- flexible control and power cables up to 3 kV
- power cables
- medium voltage cables 10-50 kV

TABOCAB® CABLE COMPOUNDS FOR A GREENER WORLD

 SILON is focused on several areas in order to support a greener world, such as producing compounds for the supply of renewable energy, as well as recycling and recyclable solutions. At SILON we strive to **decrease the carbon footprint** of our products:

- We annually consume 30 KT of recyclates for our production.
- Recyclates are used in more than 30% of our production.
- We are a proud supporter of Operation Clean Sweep®, an initiative bolstering the zero waste approach in plastic resin handling operations.





Materials for SOLAR CABLES

• developed especially for solar cable solutions

Materials for HFFR CABLES

• CPR classification, insulation materials, jacketing materials

Recycled materials for POWER CABLES

 jacketing compounds acc. HD620 S2, type DMP2, IEC 60502, ST7, based on recycled material, alternative mix with FR Masterbatch E_{ca} class

TABOCAB® COMPOUNDS FOR SOLAR CABLES



TABOCAB® cross-linkable compounds TABOCAB SXI 008 and TABOCAB SXG 011 from SILON are specially developed compounds for solar cable insulation and sheathing. Thanks to their durability, resistance to UV and chemicals, flexibility and outstanding dielectric and flame-retardant properties, they are suitable for both indoor and outdoor installations.

TABOCAB' SOLAR COMPOUNDS DESCRIPTION

TABOCAB® **XLPE** insulation and **XL-HFFR** jacket compounds are produced by Sioplas technology, both moisture-cured and designed for photovoltaic and grid connection cables of up to 2 kV, with a service temperature of -40 – +90°C and extended service life (20 000 h at 120°C).

TYPICAL APPLICATION AND ADVANTAGES

Cable sheathing and insulation for **PHOTOVOLTAIC CABLES** in the construction of H1Z2Z2-K and in cables requiring El 5 (EN 50363-5) compounds. The main advantages are excellent fire retardancy, easy processability, long life, flexibility, punch resistance, UV stability, lower weight, and production speed.

TABOCAB° solar cable compounds comply with:

- EN 50618, IEC 62930, EN 60332-1-2
- For both compounds, SILON offers suitable catalyst masterbatches.
- TABOCAB® SXI 008: TABOCAB® CM 009 = 94 : 6 %
- TABOCAB® SXG 011: TABOCAB® CM 010 = 95 : 5 %





TABOCAB® RECYCLED COMPOUNDS



TABOCAB TPS 908 is a UV stabilised HDPE-based jacketing compound available in black colour.

TYPICAL APPLICATION:

Sheathing of POWER and COMMUNICATION CABLES, sheathing of optical cables.

PROPERTIES COMPLY WITH:

DIN VDE 0276 620, type DMP 2, IEC 60502 part 2 type ST 7, HD 620 S2, DIN VDE 0207 type 2YM3, EN 50290-2-24, HD 603 S1 DMP 1, 2, 5, 7, 8

The compound is halogen-free, but not flame retardant (CPR fire class F_{ca}). For applications, where E_{ca} CPR classification is required, SILON can supply the compatible TABOCAB XM 906 flame retardant masterbatch.

TABOCAB® TPS 908 is developed to meet all application requirements, while respecting principles of sustainability. Part of the compound is made of industrial recyclate from high-capacity sources with stable quality and availability.

The SILON compounding process incorporates other polymers to secure optimal physical and mechanical properties, stabilising the compound for customer processing conditions and individual requirements.



RESEARCH IS THE HEART OF OUR DEVELOPMENT

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R&D lies at the heart of our business. The SILON Group Competence Center, located in the Czech Republic, is a modern R&D facility that aims to boost innovation and enhance our customer support. Our extensive knowledge and understanding of client needs lies at the heart of successful long-term partnerships. Our technical experts help us in choosing the best products for your specific needs and can support you in developing your technical process needs.



The Research and Development Center includes





FACILITIES

- Compounding line for small-scale production and sampling
- Laboratory extruder
- Autoclave chamber, helping customers to find optimal curing cycle
- Laboratory kneader mixer

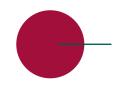
DEVICES

- DSC (Differential Scanning Calorimetry)
- SEM (Scanning Electron Microscope)
- OCS (Optical Control System)
- Rotational Rheometer
- HPLC (High Performance Liquid Chromatography)
- Universal testing machine for mechanical properties
- FTIR (Fourier-Transform Infrared Spectroscopy)
- TGA (Thermogravimetric Analyzer)
- XRF (X-ray Fluorescence)
- GC-MS (Gas Chromatography–Mass Spectrometry)
- UV-VIS
- Karl Fischer Titration

MEASUREMENT METHODS

- LOI (Limiting Oxygen Index)
- Gel content (Crosslinking Level of Final Product)
- TOC content (Total Organic Carbon Content)
- MFI (Melt Flow Index)
- OIT (Oxidative Induction Time)
- Additives and stabilizers
- Water concentration in material
- Density
- Material Aging
- Hot set test

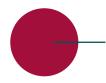
FIND THE BEST SOLUTION



THERMOPLASTIC HFFR INSULATION AND SHEATHING COMPOUNDS

APPLICATION				COMMON BASIC FEATURES										
Insulation	Sheathing	Renewable energy	SILON product code	Hardness – Shore D	Density [g/cm³]	Tensile strength [MPa]	Elongation at break [%]	[%]	MFI- Value [g/10min]	MFI- Method	Halogen-free	Flame retardant	Low-smoke	UV Stability
√	√	×	TABOCAB TPG 002	44	1,520	13,0	180	37,0	7,5	150 °C / 21,6 kg	√	√	√	×
√		×	TABOCAB TPG 002 UV	44	1,520	13,0	180	37,0	7,5	150 °C / 21,6 kg	√	√	√	✓
√	√	×	TABOCAB TPG 003	50	1,510	12,5	270	37,0	8,5	150 °C / 21,6 kg	√	✓	✓	×
		×	TABOCAB TPG 004	45	1,520	9,5	200	35,0	4,0	150 °C / 21,6 kg		√	√	√
~	✓	×	TABOCAB TPG 008	55	1,550	11,5	150	28,0	6,0	150 °C / 21,6 kg	√	√	√	×
✓	✓	×	TABOCAB TPG 009	55	1,540	11,5	150	32,0	6,0	150 °C / 21,6 kg	√	√	√	×
√	√	×	TABOCAB TPG 902 UV	44	1,520	11,0	220	35,0	5,0	150 °C / 21,6 kg	✓	√	√	√
	×	×	TABOCAB TPI 009	60	0,960	20,0	400		1,2	140 °C / 5,0 kg	~	×	×	×
×	~	×	TABOCAB TPS 004	45	1,520	12,5	180	42,0	4,8	150 °C / 21,6 kg	✓	√	√	×
√	✓	×	TABOCAB TPS 007	40	1,170	9,0	500	27,0	1,8	190 °C / 2,16 kg	✓	×	×	√
×	_	×	TABOCAB TPS 908	60	0,950	30,0	800	-	1,1	190 °C / 5,0 kg	✓ 	×	×	✓
×	√	×	TABOCAB TPS 909	60	0,948	25,0	800	-	1,5	190 °C / 5,0 kg	√	×	×	√

STANDARDS	TYPICAL CABLE PRODUCT	HFFR CPR CLASS*	Automotive	Renewables	Construction	Industry
• EN 50363-7 TI6, TI7 • EN 50363-8 TM7 • IEC 60092-359 SHF1 • IEC 60502-1 ST8 • VDE 0207/24 HM2, HM4 • VDE 0250/215 HM5"	• JE-H(St)H FE180/E30 – E90 • NHXH E30– E90 • N2XH E30 – E90"	Dca, Eca	control cable		power HFFR cable	
• EN 50363-7 T16, T17 • EN 50363-8 TM7 • IEC 60092-359 SHF1 • IEC 60502-1 ST8 • VDE 0207/24 HM2, HM4 • VDE 0250/215 HM5"	• JE-H(St)H FE180/E30 – E90 • NHXH E30– E90 • N2XH E30 – E90	Dca, Eca	control cable		power HFFR cable	
• EN 50363-7 TI6, TI7 • EN 50363-8 TM7 • IEC 60092-359 SHF1 • IEC 60502-1 ST8 • VDE 0207/24 HJ2 • VDE 0207/24 HM2, HM4	• H05 Z1Z1 • J-H(St)H • LiHH	Dca, Eca		control and sign	nal cable	
• EN 50363-8 TM7 • IEC 60092-359 SHF1 • IEC 60502-1 ST8 • VDE 0207/24 HM2, HM4	Sheathing of marine cables	Dca, Eca	control cable			marine cables
• EN 50363-7 TI6, TI7 • EN 50363-8 TM7 • IEC 60502-1 ST8 • VDE 0207/24 HM2,HM4 • VDE 0250/215 HM5	• JE-H(St)H FE180/E30 – E90 • NHXH E30– E90 • N2XH E30 – E90	Fca	control cable			
• EN 50363-7 TI6, TI7 • EN 50363-8 TM7 • IEC 60502-1 ST8 • VDE 0207/24 HM2,HM4 • VDE 0250/215 HM5	• JE-H(St)H FE180/E30 – E90 • NHXH E30– E90 • N2XH E30 – E90	Eca	control cable			
• EN 50363-7 TI6, TI7 • EN 50363-8 TM7 • IEC 60092-359 SHF1 • IEC 60502-1 ST8 • VDE 0207/24 HM2, HM4 • VDE 0250/215 HM5	• JE-H(St)H FE180/E30 – E90 • NHXH E30– E90 • N2XH E30 – E90	Dca, Eca	control cable			
• EN 50290-2-23	Foamed insulation					telephone cables
• EN 50363-8 TM7 • IEC 60092-359 SFH1 • IEC 60502-1 ST8 • VDE 0207/24 HM2, HM4	Sheathing of CPR cables - power, control and signal: • JE-H(St)H FE180/E30 – E90 • NHXH E30 – E90 • N2XH E30 – E90	Cca, Dca, Eca		-	CPR 1 kV HFFR cable	optical cables
• EN 50214 • HD 22.15 S1	• H05Z1Z1H6-F	Fca	control cable	-	elevetator cables	
• DIN VDE 0207 type 2YM3 • EN 50290-2-24 • HD 603 S1 DMP 1, 2, 5, 7, 8 • IEC 60502 part 2 type ST7	Sheathing of MV cables					energy cables optical cables MV distributi- on cables
• DIN VDE 0207 type 2YM3 • EN 50290-2-24 • HD 603 S1 DMP 5, 7, 8 • IEC 60502 part 2 type ST7	Sheathing of MV cables					cables optical cables MV distributi- on cables



CROSS-LINKABLE INSULATION AND SHEATHING COMPOUNDS

APPLICATION				COMMON BASIC FEATURES									
Insulation	Sheathing	Renewable energy	SILON product code	Hardness – Shore D	Density [g/cm³]	Tensile strength [MPa]	Elongation at break [%]	[%]	MFI Value [g/10 min]	MFI Method	Halogen-free	Flame retardant	Low-smoke
√	×	×	TABOCAB SXI 006	50	0,925	20,0	500	-	3,0	190 °C / 5,0 kg	√	×	×
	×	×	TABOCAB SXI 007	62	0,946	21,0	700	-	0,9	190 °C / 5,0 kg	√	×	×
√	×	√	TABOCAB SXI 008	48	0,914	21,5	700	_	2,2	190 °C / 5,0 kg	√	×	×
√	×	×	TABOCAB SXI 010	37	0,900	17,0	700	-	5,5	190 °C / 5,0 kg	√	×	×
√	×	√	TABOCAB SXI 011	50	0,916	21,5	650	-	2,7	190°C / 5,0 kg	√	×	×
√	×	×	TABOCAB SXI 012	58	0,920	20,0	500	_	2,7	190 °C / 5,0 kg	√	×	×
√	×	×	TABOCAB SXI 013	58	0,920	20,0	500	-	2,7	190 °C / 5,0 kg	√	×	×
✓	×	×	TABOCAB SXI 014	58	0,920	20,0	500	-	3,2	190 °C / 5,0 kg	√	×	×
√	√	×	TABOCAB SXG 010	55	0,980	18,0	250	-	1,3	190 °C / 5,0 kg	✓	×	×
✓	√	√	TABOCAB SXG 011	45	1,510	14,5	250	37,0	11,0	150 °C / 21,6 kg	√	√	√
		✓	TABOCAB SXG 015	50	1,090	18,0	500		3,0	190 °C / 5,0 kg	no	√	

		Automotive	Renewables	Construction	Industry
STANDARDS	TYPICAL CABLE PRODUCT	Automotive	Reflewables	Construction	industry
• ISO 6722 • LV 112 • SAE J 1128	Insulation (CM 012) and XL-HFFR sheathing (CM 013) of car cables	automotive cable			
• ISO 6722 • LV 112 • SAE J 1128	• FLMR2X • FLR2X • FLR2X11Y	control cable			
• EN 50618 • HD 604 2XI1 • IEC 60092-351 • IEC 60502-1 • IEC 62930 • VDE 0276 2XI1	Insulation of solar cables H1Z2Z2-K		photovoltaic cable		
• IEC 60502-1	Flexible insulation				signal cables, control cables,power cables
• EN 50618 • HD 604 2XI1 • IEC 60092-351 • IEC 60502-1 • IEC 62930 • VDE 0276 2XI1	Insulation of solar cables H1Z2Z2-K		photovoltaic cable		
• IEC 60092-351 • IEC 60502-1	Insulation of construction and industrial cables				signal cables, control cables,power cables
• IEC 60092-351 • IEC 60502-1"	Insulation of construction and industrial cables				signal cables, control cables,power cables
• HD 604 2XI1 • IEC 60092-351 • IEC 60502-1 • VDE 0276 2XI1"	Insulation of construction and industrial cables				signal cables, control cables,power cables
• HD 626.4F S1 • VDE 0276 T.626-4-Fm	Insulation and sheathing for aerial bundle cables (ABC)-NFA2X			aerial bundle cable	
• EN 50363-5 • EN 50618 • IEC 62930	Sheathing of solar cables H1Z2Z2-K		photovoltaic cable		
• UL 44 • UL 854	Insulation and sheathing of photovoltaic cables		photovoltaic cable		



TABOCAB AM 001		COMMON E						
TABOCAB AM 002 Any XLPE 1,140 20,0 190 °C / 2,16 kg ✓ X TABOCAB AM 303 Red SXI 006 1,070 8,0 190 °C / 2,16 kg ✓ X X TABOCAB AM 904 Black Any XLPE 1,060 1,0 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 003 SXI 012, SXI 014 0,930 5,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 005 SXI 012, SXI 014 0,960 1,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 006 SXI 010, SXI 012, SXI 014 0,960 1,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 007 SXI 010, SXI 012, SXI 014 0,950 10,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 008 SXI 010, SXI 012, SXI 014 0,930 3,5 190 °C / 2,16 kg ✓ X X TABOCAB CM 009 SXI 008, SXI 001 0,940 35,0 190 °C / 2,16 kg X X TABOCAB CM 011 SXI 006, SXI 007 <td< td=""><td>SILON product code</td><td>Recommended for cross-linkable compounds</td><td>Density [g/cm³]</td><td>MFI Value [g/10 min]</td><td>MFI Method</td><td>XLPE insulation</td><td>XL-HFFR</td><td>UV protection</td></td<>	SILON product code	Recommended for cross-linkable compounds	Density [g/cm³]	MFI Value [g/10 min]	MFI Method	XLPE insulation	XL-HFFR	UV protection
TABOCAB AM 303 Red SXI 006 1,070 8,0 190 °C / 2,16 kg ✓ X TABOCAB AM 904 Black Any XLPE 1,050 1,0 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 003 SXI 012, SXI 014 0,930 5,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 005 SXI 012, SXI 014 0,960 1,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 006 SXI 010, SXI 012, SXI 014 0,950 10,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 007 SXI 010, SXI 012, SXI 014 0,950 10,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 008 SXI 010, SXI 012, SXI 014 0,930 3,5 190 °C / 2,16 kg ✓ X X TABOCAB CM 009 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 010 SXI 007 0,930 14,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 013 SXI 006, SXI 0	TABOCAB AM 001	Any XLPE	0,960	3,1	190 °C / 2,16 kg	✓	×	×
Red	TABOCAB AM 002	Any XLPE	1,140	20,0	190 °C / 2,16 kg	✓	×	×
TABOCAB AM 904 Black Any XLPE 1,050 1,0 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 003 SXI 012, SXI 014 0,930 5,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 005 SXI 012, SXI 014 0,960 1,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 006 SXI 010, SXI 012, SXI 014 0,950 10,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 007 SXI 010, SXI 012, SXI 014 0,920 3,5 190 °C / 2,16 kg ✓ X X TABOCAB CM 008 SXI 010, SXI 012, SXI 014 0,930 3,5 190 °C / 2,16 kg ✓ X X TABOCAB CM 009 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 010 SXG 011 0,960 40,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 011 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 019		SXI 006	1,070	8,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 005	TABOCAB AM 904	Any XLPE	1,050	1,0	190 °C / 2,16 kg	✓	×	√
TABOCAB CM 006	TABOCAB CM 003	SXI 012, SXI 014	0,930	5,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 007 SXI 010, SXI 012, SXI 014 0,920 3,5 190 °C / 2,16 kg V X TABOCAB CM 008 SXI 010, SXI 012, SXI 014 0,930 3,5 190 °C / 2,16 kg V X TABOCAB CM 009 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 010 SXG 011 0,960 40,0 190 °C / 2,16 kg X X TABOCAB CM 010 SXI 007 0,930 14,0 190 °C / 2,16 kg X X TABOCAB CM 012 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg V X TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 2,16 kg V X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg V X TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg V X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 909 Black SXI 008,	TABOCAB CM 005	SXI 012, SXI 014	0,960	1,8	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 008 SXI 010, SXI 012, SXI 014 0,930 3,5 190 °C / 2,16 kg ✓ X TABOCAB CM 009 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 010 SXG 011 0,960 40,0 190 °C / 2,16 kg X X TABOCAB CM 011 SXI 007 0,930 14,0 190 °C / 2,16 kg ✓ X TABOCAB CM 012 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg ✓ X TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 2,16 kg ✓ X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg ✓ X X TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 309 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X </td <td>TABOCAB CM 006</td> <td>SXI 010, SXI 012, SXI 014</td> <td>0,950</td> <td>10,0</td> <td>190 °C / 2,16 kg</td> <td>✓</td> <td>×</td> <td>×</td>	TABOCAB CM 006	SXI 010, SXI 012, SXI 014	0,950	10,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 009 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 010 SXG 011 0,960 40,0 190 °C / 2,16 kg X X TABOCAB CM 011 SXI 007 0,930 14,0 190 °C / 2,16 kg V X TABOCAB CM 012 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg V X TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 2,16 kg V X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg V X V TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg V X TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg V X TABOCAB CM 309 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 909 SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 914 <td< td=""><td>TABOCAB CM 007</td><td>SXI 010, SXI 012, SXI 014</td><td>0,920</td><td>3,5</td><td>190 °C / 2,16 kg</td><td>✓</td><td>×</td><td>×</td></td<>	TABOCAB CM 007	SXI 010, SXI 012, SXI 014	0,920	3,5	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 010	TABOCAB CM 008	SXI 010, SXI 012, SXI 014	0,930	3,5	190 °C / 2,16 kg	√	×	×
TABOCAB CM 011 SXI 007 0,930 14,0 190 °C / 2,16 kg V X TABOCAB CM 012 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg V X TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 5,0 kg V X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg V X V TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg V X TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg V X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg V X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg V X V	TABOCAB CM 009	SXI 008, SXI 011	0,940	35,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 012 SXI 006, SXI 007 0,940 14,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 5,0 kg ✓ ✓ X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg ✓ X X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg ✓ X ✓ TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg ✓ X ✓	TABOCAB CM 010	SXG 011	0,960	40,0	190 °C / 2,16 kg	×	×	√
TABOCAB CM 013 SXI 006, SXI 007 1,600 1,1 190 °C / 5,0 kg ✓ ✓ X TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg ✓ ✓ ✓ TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg ✓ ✓ TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg ✓ X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg ✓ X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg ✓ X	TABOCAB CM 011	SXI 007	0,930	14,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 017 0,930 3,5 190 °C / 2,16 kg ✓ ✓ TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg ✓ ✓ TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg ✓ X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg ✓ X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg ✓ X	TABOCAB CM 012	SXI 006, SXI 007	0,940	14,0	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 019 SXG 015 0,930 3,5 190 °C / 2,16 kg V X V TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg V X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg V X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg V X	TABOCAB CM 013	SXI 006, SXI 007	1,600	1,1	190 °C / 5,0 kg	✓	√	×
TABOCAB CM 020 SXI 010, SXI 012, SXI 013, SXI 014 0,930 3,8 190 °C / 2,16 kg V X TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg V X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg V X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg V X	TABOCAB CM 017		0,930	3,5	190 °C / 2,16 kg	✓	×	√
TABOCAB CM 309 Red SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg ✓ X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg ✓ X	TABOCAB CM 019	SXG 015	0,930	3,5	190 °C / 2,16 kg	✓	×	√
Red SXI 008, SXI 011 0,940 35,0 190 ℃ / 2,16 kg ✓ X TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 ℃ / 2,16 kg ✓ X TABOCAB CM 914 SXG 010 1,050 4,4 190 ℃ / 2,16 kg ✓ X TABOCAB CM 915 SXG 010 1,100 4,0 190 ℃ / 2,16 kg ✓ X	TABOCAB CM 020	SXI 010, SXI 012, SXI 013, SXI 014	0,930	3,8	190 °C / 2,16 kg	✓	×	×
TABOCAB CM 909 Black SXI 008, SXI 011 0,940 35,0 190 °C / 2,16 kg ✓ X TABOCAB CM 914 SXG 010 1,050 4,4 190 °C / 2,16 kg ✓ X TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg ✓ X		SXI 008, SXI 011	0,940	35,0	190 °C / 2,16 kg	√	×	×
TABOCAB CM 915 SXG 010 1,100 4,0 190 °C / 2,16 kg	TABOCAB CM 909	SXI 008, SXI 011	0,940	35,0	190 °C / 2,16 kg	√	×	×
	TABOCAB CM 914	SXG 010	1,050	4,4	190 °C / 2,16 kg	✓	×	√
TABOCAB XM 906 TPS 908, TPS 909 1,790 0,2 190 °C / 5,0 kg × × ×	TABOCAB CM 915	SXG 010	1,100	4,0	190 °C / 2,16 kg	√	×	√
	TABOCAB XM 906	TPS 908, TPS 909	1,790	0,2	190 °C / 5,0 kg	×	×	×



TECHNICAL SUPPORT

Our technical experts are always ready to help you choose the right product for your application and support you in developing your technical process needs.

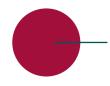
Testing on our cable line allows us to recommend processing temperatures, define extrusion capabilities and process speed with regard to the strain on the extrusion line motors.

We test the mechanical properties of the product after the extrusion (tensile strength, elongation at break, shrinkage and surface smoothness). We also test the colourability of our compounds and we can therefore recommend the amount needed to achieve the required product surface colour.

Customer satisfaction is our priority and so we never restrict ourselves to just delivering compounds. Technical support and the correct configuration of the processing mode on the customer's equipment is a matter of course.



HOW TO STORE AND PROCESS IT



HFFR THERMOPLASTIC COMPOUNDS

PROPERTIES

The HFFR compound product range is a group of thermoplastic, halogen-free flame retardant, low-smoke and non-toxic compounds based on polyolefins and mineral fillers. These compounds are used to produce cable insulation and sheathing. These compounds are developed to be easy to process and for optimally high productivity. The individual compounds are designed depending on the type of end cable application so that they retain their thermo-mechanical properties and a high level of fire retardancy, therefore providing a solution with greater protection for people and property in case of fire.

PROCESSING

We recommend that these compounds be processed using low-compression extrusion machines. They can also be processed using screw extruders for PVC, but with the expectation of lower performance. Individual process and technical parameters are given in the specific TDS for the HFFR compounds.

STORAGE CONDITIONS

The compounds must be stored in dry, covered areas at ambient temperatures not exceeding 30°C. The compounds must be stored in their original, undamaged packaging as supplied by the SILON s.r.o. manufacturer. They must not be exposed to moisture, sunlight or thermal radiation. The maximum compound storage period is usually 12 months from the date of manufacture marked on the product packaging.

PACKAGING

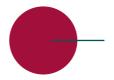
Compounds are packaged in bags and octabins on wooden pallets.

20 kg



600 kg 1 000 kg 1 200 kg





XL-HFFR THERMOSETTING COMPOUNDS

PROPERTIES

The XL-HFFR compound product range is a group of thermosetting, halogen-free, flame retardant, low-smoke and non-toxic compounds based on polyolefins and mineral fillers, which can be cross-linked using heat or moisture. A catalyst masterbatch is added during the final extrusion together with the main compound (SIOPLAS method). These products are suitable for producing cross-linked insulation or sheathing.



XLPE THERMOSETTING COMPOUNDS

PROPERTIES

The XLPE compound product range is a group of polyethylene thermosetting compounds which can be cross-linked using heat or moisture. A catalyst masterbatch is added to the main compound before the extrusion process (SIOPLAS method). These products are suitable for producing cross-linked insulation.

PROCESSING

Before extrusion, the compound must be mixed with the specific quantity of catalyst masterbatch specified in the TDS for the relevant material. Correct processing of silane-grafted compounds with the catalyst masterbatch depends on the speed of extrusion; the faster the material is extruded, the better the results. Any delays, e.g., interruption of production, along with high temperatures, have a negative impact on the quality of processing, which can lead to premature cross-linking. The extruded compound must be cooled in a water bath. We recommend that the cross-linking process takes in hot water or a low-pressure steam bath. Cross-linking is also possible using air humidity. The dependence of the cross-linking kinetics on the thickness of the extruded layer of insulation or sheathing and on the ambient temperature and humidity at the site of storage of the finished product or semi-finished product must be taken into account in such cases. We recommend that these compounds be processed on higher-compression extrusion machines. The individual process and technical parameters are given in the specific TDS for XL-HFFR compounds or XLPE compounds.

STORAGE CONDITIONS

The compounds must be stored in dry, covered areas at ambient temperatures not exceeding 30°C. The compounds must be stored in their original, undamaged packaging as supplied by the SILON s.r.o. manufacturer. They must not be exposed to moisture, sunlight or thermal radiation. The maximum compound storage period is usually 9 months from the date of manufacture marked on the product packaging. Once the packaging has been opened, the compound should be processed within several hours, otherwise, the compound may degrade and complicate the smooth production process as a result of moisture absorption.

PACKAGING

Compounds are packaged in moisture-resistant bags and octabins on wooden pallets. The goods shall be stored inhouse.

20 kg



600 kg 1 000 kg 1 200 kg





Get in touch with us



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SILON ASIA?





