

Developing halogen-free solutions that meet mechanical, flame, and processability requirements is challenging. Our high-filled materials offer superior flame resistance. Our solutions undergo rigorous testing for environmental stress cracking, moisture, temperature, and mechanical stress, particularly for low and medium voltage applications. Cabopol offers CPR-compliant materials for insulation and sheathing, alongside copper LAN and optical fiber solutions. Our materials prioritize high processability, flame, and chemical resistance, tailored to customer specifications.



LSZH COMPOUNDS FOR POWER WIRE & CABLE

Code	Density	Hardness ShD/15s	Tensile strength N/mm2	Elongation at break %	Specific Application	Sheathing	Insulation	Bedding	Additional Features
HZ 05GG	1,51	50	14,0	180	General purpose insulation	/	/		\bigcirc^{\odot}
HZ 02DE	1,48	53	12,0	150	Good processability insulation	/	/		
HZ 01DH	1,47	53	15,0	170	Temperature rating 90°C		/		
HZ 02FG	1,36	43	14,0	280	High flexibility sheathing and insulation	/	/		
HZ 01GS	1,30	45	13,5	350	Sheathing material according UNE 211620 5e-type DMZ2	/			
HZ 02GS	1,30	52	12,5	300	Sheathing material according UNE 211620 5e-type DMZ2	/			© ₩ Cpr
HZ 05GGC	1,55	50	13,0	150	Insulation & sheathing	/	/		⊕ Cpr
HZ 01CPR	1,55	50	13,0	150	Hydrolisis resistance Insulation		<u></u>		⊘ [©] Cpr
HZ 02BED	1,62	52	10,0	80	Bedding			\	© [©]
HZ 03BED	1,68	49	-	130	CPR Bedding			\	& Cpr







HIGH TEMP.







STRESS-CRACKING

LSZH COMPOUNDS FOR SOLAR & PHOTOVOLTAIC

© Code	Density	Hardness ShD/15s	Tensile strength N/mm2	Elongation at break %	Specific	Standards	E- Beam Crosslinked	Silane Crosslinked	Peroxide Crosslinked	Sheathing	Insulation	Additional Features
HZ 03ST	1,41	38	14	300	E-Beam & Silane Crosslinked	TÜV 2PFG1169 EN 50618	\	/			\	
HZ 01ST	1,41	42	10	220	E-Beam & Silane Crosslinked	TÜV 2PFG1169 EN 50618	\	/		/		
HZ 01SP	1,48	45	15	180	CV Peroxide Crosslinked	TÜV 2PFG1169 EN 50618			/	<u></u>	/	



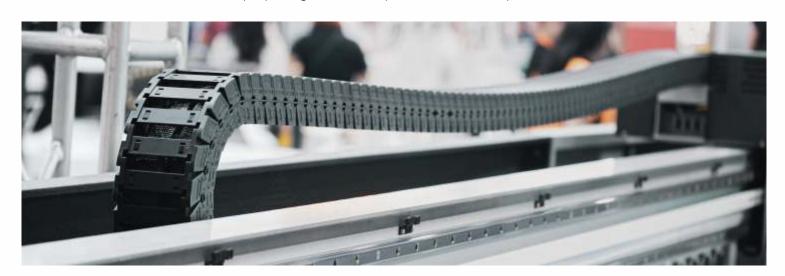








LACOFLEX TEC compounds for wire and cable are design to meet very different requirements, from Oil resistant grades for UL62 and UIC 895 and standard grades with no oil resistance up to Automotive insulation 150°C rating grades. We have developed TPE-E, TPE-O and TPE-S grades depending on requirements. This compounds can be halogen free flame retardant, Low halogen flame retardant and with no flame retardancy, depending on standard requirements and client requirement.



Cabopol have developed special TPE-E low density halogen free flame retardant grades with excellent oil resistance, high flexibility and low hardness. This special compounds have excellent chemical resistance and high temperature rating from 105 up to 150°C rating. The TPE-E compounds combine high flexibility, high cut-through resistance, high flex cycle behaviour, low temperature flexibility with good mechanical properties and chemical resistance. Cabopol TPEs can meet the client needs in terms of hardness, adjusting the hardness to client needs.



TPE COMPOUNDS FOR FLEXIBLE WIRE & CABLE

©) Code	Density	Hardness	Operating temp°C	Tensile strength Mpa	Elongation at break %	Ageing conditions	Standards	Class	UL94	% IO7	Specific Application	Halogen free	Halogenated	Insulation	Sheathing	Additional Features
TPE100UL-A	1,12	85 ShA	105°C	13	300	136°C 168h	UL 62	14, 15, 16	V0	29	Energy railway & charging cables	<u> </u>		/	<u> </u>	☼ ~ ~ ∴☼ [] †※ [☑ ; ☼ [≅ Ex
TPE100HF-90A	1,03	90 ShA	105°C	10	500	136°C 168h	UL 62	14, 15, 16	V0	30	Energy & tape battery cables	<u> </u>		<u> </u>	<u> </u>	☼ ~ ~ ∴☼ [] †※ [☑ ; ☼ [≅ Ex
TPE100NF-80A	1,10	80 ShA	105°C	13	400	136°C 168h	UL 62	14, 15, 16	НВ	23	Energy & railway	<u> </u>		<u> </u>		☼ ~ ~ ∴☼ [] †※ [☑ ; ☼ [≅ Ex
TPE100UL-85A	1,20	85 ShA	105°C	11	300	136°C 168h	UL 62	14, 15, 16	V0	28	Energy & tape battery cables		<u> </u>	<u> </u>	<u> </u>	№ ~ .*
TPO80HZ-80A	1,32	85 ShA	80°C	9	500	90°C 168h	EN50363	TI6, TI7, TM7	НВ	26	Energy & elevator cables	\			<u> </u>	№ ~ .*
TPE80HZ-45D	1,55	45 ShD	80°C	10	150	90°C 168h	EN50363	TI6, TI7, TM7	НВ	36	Energy & elevator cables	<u> </u>			<u></u>	☼ ~ ~ ∴☼ [] †※ [] †※ [] Ex























FLEXIBLE AT

©) Code	Density	Hardness	Operating temp°C	Tensile strength Mpa	Elongation at break %	Ageing conditions	Standards	Class	UL94	% IOT	Specific Application	Halogen free	Sheathing	Additional Features
TPU100HZ-90A	1,23	90 ShA	105°C	30	500	136°C 168 h	HD 22.10 UL 758 CSA 22.2	TMPU 50.227 Class 31	V0	24	Industrial cables Mining cables Flexible cables Charging cables	<u></u>	<u></u>	★★★Ex
TPU100HZ-91A	1,23	91 ShA	105°C	34	450	136°C 168 h	HD 22.10 UL 758 CSA 22.2	TMPU 50.227 Class 31	V0	24	Industrial cables Mining cables Flexible cables Charging cables	<u></u>	<u></u>	60
TPU100HZ-92A	1,25	92 ShA	105 °C	20	400	136°C 168 h	UL 758	50.227	V0	28	Industrial cables Mining cables Flexible cables Charging cables	<u></u>	/	★★★Ex
TPU100HZ-92AF	1,26	92 ShA	105 °C	20	400	136°C 168 h	UL 758	50.227	V0	32	Industrial cables Mining cables Flexible cables Charging cables	<u></u>	<u></u>	60
TPU125HZ-80A	1,20	88 ShA	105 °C	28	450	136°C 168 h	HD 22.10 UL 758 CSA 22.2	TMPU 50.227 Class 31	VO	29	Industrial cables Mining cables Flexible cables Charging cables	<u></u>	<u></u>	★★Ex
TPU90HZ-90A	1,47	93 ShA	90°C	25	400	110°C 168 h	HD 22.10 UL 758 CSA 22.2	TMPU 50.227 Class 31	V2	29	Low smoke Low toxicity	<u></u>	<u></u>	



























FLAME RETARDANT

FLEXIBLE AT LOW TEMP.

WEATHER RESISTANT

HIGH TEMP. RESISTANT

LOW TEMP. RESISTANT

OIL RESISTANT

UV RESISTANT



(Code	Density	Hardness	Operating temp. °C	Tensile strength Mpa	Elongation at break %	Ageing conditions	Standards	Class	UL94	% IOT	Halogen free	Silane Crosslinked	Insulation	Sheathing	Additional Features
TPE105LSHF-90A	1,60	85 ShA	105°C	11	200	136°C 168h	UIC 895 NEK 606	Indice B Category A, B and C	V0	40	<u></u>		<u> </u>	<u></u>	\$\mathcal{O}\$ \$\sigma\$ \$\sigma\$ \$\mathcal{O}\$ \$\mathcal{O}\$
TPE105LSHF-50D	1,56	93 ShA	105°C	10	160	136°C 168h	UIC 895	Indice B	V0	36	<u></u>		<u> </u>	<u></u>	★★Ex
TPX105HZ-90A	1,52	88 ShA	105°C	12	150	136°C 168h	IEC 60092-360 UIC 895 NEK 606	SHF2 Indice B Category A, B and C	V0	36	<u></u>	<u></u>	<u> </u>	<u></u>	★★★Ex
TPX105HZ-95A	1,52	94 ShA	105°C	12	125	136°C 168h	IEC 60092-360 UIC 895 NEK 606	SHF2 Indice B Category A, B and C	V0	36	<u></u>	<u></u>	<u> </u>	<u></u>	♣♦♦♦♦♦♦♦♦♦
TPE100NF-80A	1,10	80 ShA	105°C	13	400	136°C 168h	UL 62	14, 15, 16	НВ	23	<u></u>		<u> </u>		★★★Ex
TPE100UL-75A	1,15	80 ShA	105°C	10	300	136°C 168h	UL 62	14, 15, 16	V2	25			<u></u>	<u></u>	♣♦♦♦♦♦♦♦♦♦♦
TPE100UL-85A	1,20	85 ShA	105°C	11	300	136°C 168h	UL 62	14, 15, 16	V0	28			<u> </u>	<u></u>	★ 回 ☆ ■ Ex



























Polyprime compounds for power cables are prepared to respond effectively to the requirements of the industry standards. Characterized for an easy and effective processability and constancy of quality. Securing a final result highly profitable in the relation quality / cost. Our range of solutions meet the requirements of: Oil resistance, hydrocarbon resistance, UV resistance, anti-termites, anti-rodents, flame retardant, low smoke emission, resistance to low temperatures, resistance to high temperatures, resistance to several adverse natural conditions & complies with all standards for PVC power cables.



PVC COMPOUNDS FOR LOW VOLTAGE POWER

(Code	Density	Hardness	Operating temp °C	Tensile strength Mpa	Elongation at break %	Specific Application	Standards	Halogenated	Sheathing	Insulation	Bedding	Additional Features
RDF/85A	1,52	88 ShA	90	14,8	150	-	ST1/TI1					-
RDB/85A	1,49	88 ShA	90	15,0	250	_	ST2/TI2	/				_
RDT/85A	1,49	87 ShA	90	15,0	175	Anti-termite	ST2/TI2					-
RDT/85R	1,49	87 ShA	90	15,0	200	Antirodents	ST2/TI2					_
LOI/40F	1,55	88 ShA	90	13,0	170	LOI 36%	ST2/TI2	Low				
ICI/83A	1,55	88 ShA	90	15,0	175	LOI 36%	ST2/TI2	Low				
ICI/80T	1,48	85 ShA	75	14,0	150	LOI 32%	UL 83 – 70°c	/	/	\		Q [©]
RGF/85L	1,48	86 ShA	90	15,0	220	LOI 30%	UL 83 – 90°c	<u></u>		\		\bigcirc
RDC/80L	1,47	82 ShA	90	13,0	200	-	XP C32321	/		/		-\\ -
ISI/90A	1,47	88 ShA	90	15,0	200	High oil resistance	UIC-895	/	/	\		{o}
ISSO/85A	1,49	88 ShA	90	15,0	200	LOI 29%	UIC-895 IEC 60332-C	/	/	\		
ICE/87A	1,55	88 ShA	90	13,0	170	LOI 30%	IEC 60332-C	Low	/	\		
AAB/89A	1,45	90 ShA	105	15,0	250	-	TI3 HD 21.1	/	/	\		-\(\)-\(\)-\(\)
AAB/75A	1,45	77 ShA	105	14,5	200	-	TM3 HD 21.1	/	/	\		-\(\dagger\)
REC/80A	1,45	82 ShA	80	15,0	200	-	TM5 - HD21.1	/	<u></u>	\		* [
RGB/79A	1,40	77 ShA	80	14,0	300	-	TM1/TM2	/	/			
EEI/75A	1,60	80 ShA	70	5,0	150	-	_	/	/			
EEI/71A	1,70	80 ShA	90	6,0	150	-	BS 7655 - 4.2 type 6	<u></u>	\			
EOC/85A	1,25	85 ShA	90	-	-	-	-	<u></u>			<u></u>	-
BEP 2000	1,90	85 ShA	90	2,5	150	High density bedding	-	<u></u>			<u></u>	-
EOA/85A	1,80	85 ShA	90	4,0	50	-	-	<u></u>			/	-



















LOW TEMP. RESISTANT

UV RESISTANT

OIL RESISTANT

HIGH TEMP. RESISTANT

FLEXIBLE AT



With emerging 5G wireless infrastructures and growing antenna market by hybrid cables, Fiber Optic Networks is one of the hottest topics across the globe and for that Cabopol has developed optic fiber solutions, these are halogen free low smoke solutions for dry and gel OF constructions. Customers are very satisfied with high speed up to 1000m/min achieved as example with 12 bundle fibers construction. Solutions are available for tight buffer, high gel resistance buffer, jackets UV, stress cracking resistance and CPR meeting solution Cca.





LSZH COMPOUNDS FOR TELECOMMUNICATIONS

© Code	Density	Hardness ShD/15s	Tensile strength N/mm2	Elongation at break %	Specific Application	Sheathing	Insulation	Bedding	Additional Features
01OFG	1.44	56	14.0	170	MDH Filler & good char formation	/	/		S ^O / Ä
010F0	1.42	57	15.0	190	Tight buffer, micromodules, gel resistant & high speed processability		/		
010FP	1.49	50	>10.0	>150	Good flame retardancy & char formation, low dripping & low heat release	/			\$ [™]
HZ 01CPR	1,55	50	13,0	150	Insulation		/		© Cpr
HZ 01TR/8000	1.10	56	20.0	600	Tracking resistance & ADSS cable	/			
HZ 02BED	1,62	52	10,0	80	Bedding			/	
HZ 02FG	1,36	43	14,0	280	High flexibility sheathing and insulation	/	/		७
HZ 02GQ	1.49	50	12,0	165	High flexibility sheathing for LAN cables	/			
HZ 03BED	1,68	49	-	130	CPR Bedding			/	© Cpr
HZ 05GG	1,51	50	14,0	180	General purpose insulation	<u></u>	<u></u>		S [©] ~
HZ 05GGC	1.57	50	10.0	>150	Good flame retardancy & char formation	/			© Cpr



















UV RESISTANT

TIGHT BUFFERED FIBRE CABLES

One of the potential problems of tight buffering is post extrusion shrinkage of the buffer material. This shrinkage puts strain on the fibre and causes increased signal attenuation. HFFR compounds are inherently low shrink due to their high mineral filler content – a value of 0.3 % is typical on compound aged for 1 hour at 80°C when tested to the method in IEC 60811-1-3. The tight buffered fibres are generally subjected a variety of tests, including thermal cycling, before being used to make optical fibre cables.



Specifications

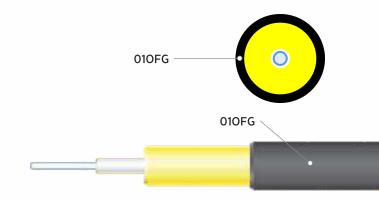
- Zero halogen, no corrosive gases IEC, EN 60754-1/-2 VDE 0482-754-1/-2
- Flame propagation IEC, EN 60332-1-2 VDE 0482-332-1-2
- Smoke density IEC, EN 61034-1/-2 VDE 0482-1034-1/-2

Applications

- Distribution systems cable
- · Indoor Data Center connections cable
- Indoor cabling for fibre to the Home (FTTH), LAN applications
- · Suitable for laying in cable trays, ducts and vertical shafts
- · Improved gel resistance

Typical construction

- Ønominal [mm]:1.8/0.9/0.5
- · Central tube 900 μm or 250 μm optical fibres (12-24)
- · LSOH with low coefficient of friction



Jelly

· White central tube & outer jacket: LFSH 010FG



Specifications

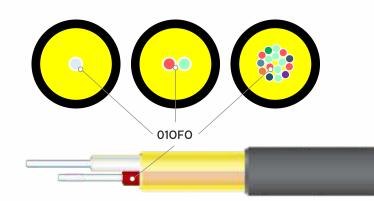
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Applications

- Distribution systems cable
- · Indoor Data Center connections cable
- Indoor cabling for fibre to the Home (FTTH), LAN applications
- · Suitable for laying in cable trays, ducts and vertical shafts

Typical construction

- Ø nominal [mm]:1.8/0.9/0.5
- Central tube 900 µm or 250 µm optical fibres (12-24)
- · LSOH with low coefficient of friction



· 1 or more optical fibre

Jelly

· White central tube & outer jacket: LFSH 010F0

FIRE RESISTANT OPTICAL CABLES

A new family of optical fire-resistant cables has been installed, used to provide the necessary levels of safety in critical environments as public buildings, subways and also in industrial areas. These new cables maintain their optical transmission characteristics with very limited change in attenuation for a long time in compliance with international standards. These innovative cable design, using special ceramifiable compound and appropriate flame shields allow to control the heat release and to guarantee the right level of mechanical protection for the optical fibres during the burning phase limiting in this way any variation in attenuations and avoiding transmission interruptions.



Specifications

- Zero halogen, no corrosive gases IEC, EN 60754-1/-2 VDE 0482-754-1/-2
- Flame propagation IEC, EN 60332-1-2 VDE 0482-332-1-2
- Smoke density IEC, EN 61034-1/-2 VDE 0482-1034-1/-2

Euroclass

- · Up to 24 fibres, Euroclass B2ca.
- · Non-metallic fibre optic outdoor & indoor cable with one central dry loose tube.
- · High crush resistance for high transmission reliability.
- Easy to handle due to cable construction with dry interstices & gel-free loose tubes.
- · Rodent protection version if needed, flame retardant, longitudinally watertight.

Typical construction

- ≤24 fibres
- · Loose tube
- Glass armour
- Ripcord
- · Flame retardant halogen-free FR/LSOH sheath

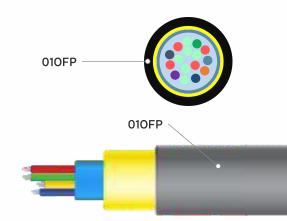


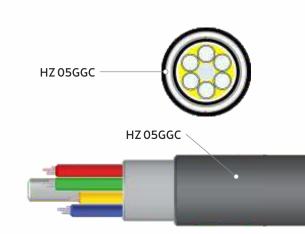
Specifications

- Zero halogen, no corrosive gases IEC, EN 60754-1/-2 VDE 0482-754-1/-2
- Flame propagation IEC, EN 60332-1-2 VDE 0482-332-1-2
- Smoke density IEC, EN 61034-1/-2 VDE 0482-1034-1/-2

Euroclass

- Indoor and universal cables with appropriate rating according to European Construction Product Directive (CPR): Euroclass Dca to B2ca.
- $\cdot \quad \text{Central tube construction up to 24 fibres}.$
- Flexible micro-bundles construction up to 96 fibres. Extensive range of indoor cables with easy stripability
- Indoor riser cables up to 144 fibres .
- · Indoor drop cables.





FLAME RETARDANT LAN CABLES

The design of communication cables requires that the best solution be found for several competing parameters and jacket material has a great impact on this task. The most common materials used on the jacket of a UTP LAN are PVC and HFFR widely used due to availability, cost, good processability, flame retardant characteristics, in addition to the interesting electrical and mechanical properties for the application. The choice of jacketing material of U/UTP category cables will depend on flame safety requirement, cable design and/or requirement of finished cable.

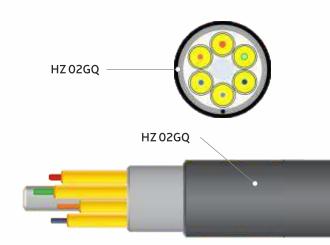


Specifications

- Zero halogen, no corrosive gases IEC, EN 60754-1/-2 VDE 0482-754-1/-2
- Flame propagation IEC, EN 60332-1-2 VDE 0482-332-1-2
- Smoke density IEC, EN 61034-1/-2 VDE 0482-1034-1/-2

Characteristics

- Metal-free, dry interstices, gel-free loose tube, rodent protection, flame retardant.
- High crush resistance for high transmission reliability.
- Easy to handle due to cable construction with dry interstices and gel-free loose tubes.
- · Longitudinal water-tightness by swelling yarn.
- · Non-metallic rodent protection.
- · Flame retardant halogen-free FR/LSOH sheath.
- · LAN backbone, access and riser zone.
- Connection cable between the building distributors and/or floor distributors up to 24 fibres, Euroclass Dca



ADSS CABLES

ADSS cable is an Optical cable with excellent mechanical and environmental performance, strong self-supporting application function, multipurpose and wide application range. It has a large market demand. It is mainly used for communication area of overhead high voltage transmission system. The ability to withstand extreme bad weather (gale, ice, etc.) is strong. Structure is stranded loose tube, non-metallic central strength (generally FRP), double PE and Tracking Resistant sheaths with peripheral aramid yarn. In order to deal with the Tracking leak, the outer Sheathing of ADSS cable are designed with UV resistant and good electrical properties, improved when compared with other typical Optical Fiber Cables.



Characteristics

- · Tracking Resistance ADSS cable
- · Aerial cables
- ADSS Complete range up to 144 fibres armoured cables in single or dual sheath.
- · Fully dielectric construction

