JUAN GILI S.L.

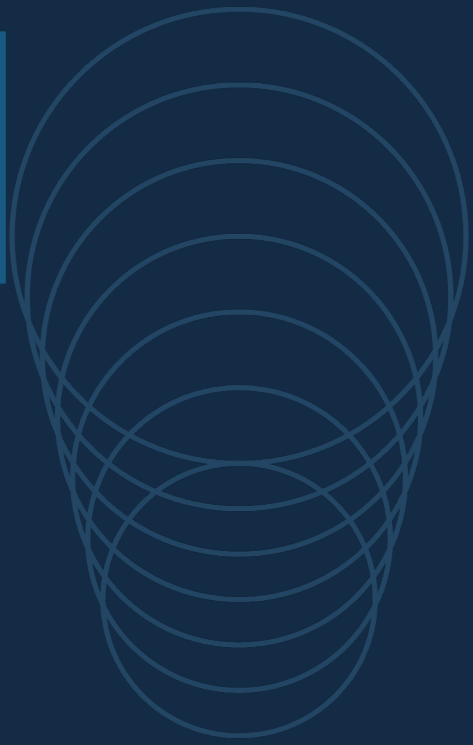
ADVANCED TECHNICAL TEXTILES FOR THE CABLE INDUSTRY

Product portfolio & technical overview | United States edition

ENGINEERED MATERIALS FOR CABLE PROTECTION

Water-blocking yarns, cords and tapes • Technical binding materials • Fire-resistant insulation • Cable fillers and ripcords

Since 1960 | Spanish family-owned manufacturer | Tailor-made textile solutions



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Company overview

JuanGiliS.L. (JGILI)is a Spanish, third-generation family-owned manufacturer of technical textile solutions for the cable industry. Founded in 1960, the company develops and manufactures water-blocking materials and other specialized textile components for energy and telecommunications cable applications.

Product portfolio

The portfolio includes water-blocking swellable soft yarns, cords and ropes; flat yarns; water-blocking and fiberglass tapes; polyester and aramid ripcords; cotton filler cords; mica tape; flame-retardant tape; and non- or semi-conductive binding tapes.

Markets and cable applications

JGILI identifies submarine, power, medium-voltage and fiber-optic cables among its target cable markets. Product applications described on the company website also include telecommunications, control, instrumentation and special cables.

Quality and environmental management

JGILI lists implemented management systems certified to EN ISO 9001:2015, EN ISO 14001:2015 and EN ISO 45001:2018. For current certificate scope, validity and copies, contact JGILI directly.

Customization and technical support

JGILI states that products can be customized to individual requirements. Buyers should provide cable construction, application, required dimensions, electrical properties, operating temperature, test methods and target standards when requesting a quotation or technical review.

This document is a commercial overview, not a substitute for controlled product datasheets, certificates, samples or written technical approval from JGILI.

Product portfolio at a glance

Product family	Primary function/application
Water Blocking Swellable Soft Yarns	Power, telecommunications and special cable constructions; longitudinal water blocking and cable core protection.
Water Blocking Swellable Soft Cords & Ropes	Longitudinal water blocking inside cable conductors; filling large gaps; reinforcement around central members; power, telecom and special cables.
Water Blocking Flat Yarns	Power and telecommunications cable cores; central members; longitudinal/helical wrapping and reinforcement layers.
Water Blocking Tapes	Under radial barriers; water-blocking armoring; between cable components; loose-tube constructions; slotted-core designs and reinforcement layers.
Water Blocking Fiberglass Tape	Fiber optic, electric power and control cables; longitudinal or helical wrapping around cable cores or fiber-optic tubes.
Polyester & Aramid Ripcords	Cable jacket opening and separation across different cable types.
Cotton Filler Cords	Fiber optic, telecommunications and low-, medium- and high-voltage power cables; central cable members.
Mica Tape	Fire-resistant power, control, instrumentation, signal, marine and submarine cables.
Flame Retardant Tape	Power, control and signal cables; industrial buildings; railway infrastructure; tunnels; subways and data-center environments.
Non- & Semi-Conductive Binding Tapes	Power cable conductor binding, shielding and separation; cable core assembly.

Technical values are included only where they are publicly listed on JGILI product pages. A dash or omitted value should not be interpreted as zero or as a product limitation.

Water Blocking Swellable Soft Yarns



PRODUCT OVERVIEW

SAF™-based soft swellable yarns designed to protect power, telecommunications and special cables. When water reaches a damaged area, the material absorbs moisture and swells to help form a barrier against longitudinal water ingress.

APPLICATIONS

Power, telecommunications and special cable constructions; longitudinal water blocking and cable core protection.

KEY FEATURES

Rapid water absorption; low shedding during cutting and splicing; flexible construction; high thermal stability; can be combined with polyester or nylon support fibers.

PUBLISHEDTECHNICAL INFORMATION

Published technical detail	Value
Core material	Soft Super Absorbing Fiber (SAF™)
Blending fibers	May include polyester and/or nylon
Function	Swells on contact with water
Customization	Available to customer requirements

The product page provides general performance information; request the current yarn datasheet for grade-specific numeric values.

View official JGILI product information

Water Blocking Swellable Soft Cords & Ropes



PRODUCT OVERVIEW

Soft swellable cords and filler ropes for water blocking and filling larger voids inside cable constructions. They absorb water rapidly and expand to help seal internal gaps.

APPLICATIONS

Longitudinal water blocking inside cable conductors; filling large gaps; reinforcement around central members; power, telecom and special cables.

KEY FEATURES

The company reports absorption up to 200× own weight and swelling speed up to 75 ml/g in the first minute for the product family. Custom diameters and formats are available.

PUBLISHED TECHNICAL INFORMATION

Parameter	Published range / value
Soft cord dry diameter	2–9 mm in listed table
Absorption speed (cord grades)	45–65 ml/g/1 min
Absorption capacity (cord grades)	46–66 ml/g/5 min
Wet diameter (cord grades)	6.5–20 mm
Temperature stability	150–230°C (listed grades)
Filler rope dry diameter	15–30 mm (ABST-15 to ABST-30)

Values vary by diameter and grade. Consult JGILI for the complete grade table and confirmation of the required test conditions.

View official JGILI product information

Water Blocking Flat Yarns



PRODUCT OVERVIEW

Flat water-blocking yarns designed for central cable members, longitudinal or helical application, and reinforcement layers around central members. The product is designed for clean processing and high-speed manufacturing.

APPLICATIONS

Power and telecommunications cable cores; central members; longitudinal/helical wrapping and reinforcement layers.

KEY FEATURES

Precision wound; low and ultra-low shrinkage options; dual-version availability; reduced weight; silicone-free; compatible with high-speed processes.

PUBLISHED TECHNICAL INFORMATION

Parameter	600	1,000	1,500	1,800	2,250
Tensile strength (N)	18	35	50	60	80
Elongation (%)	≥12	≥12	≥12	≥12	≥12
Swelling speed (ml/g/1 min)	≥28	≥30	≥32	≥35	≥40
Swelling height (ml/g/5 min)	35	40	42	45	50
Moisture content (%)	≤9	≤9	≤9	≤9	≤9

Shrinkage options published: normal 6%, low 4%, super-low 1.5–2%. Values shown are as published on the product page.

View official JGILI product information

Water Blocking Tapes



PRODUCT OVERVIEW

A range of non-conductive, reinforced, semi-conductive and film-laminated water-blocking tapes. Designed to replace flooding compounds or provide moisture barriers and reinforcement between cable components.

APPLICATIONS

Under radial barriers; water-blocking armoring; between cable components; loose-tube constructions; slotted-core designs and reinforcement layers.

KEY FEATURES

Polyester non-woven layers, polyacrylate swelling powder and optional reinforcement, carbon black or PET film, depending on construction. Custom slit widths and formats.

PUBLISHED TECHNICAL INFORMATION

Published product range	Key specifications
Thickness	0.10–0.50 mm across listed non-conductive types; reinforced types 0.30–0.35 mm
Basis weight	40–120 g/m² across listed non-conductive types
Tensile strength	≥20–≥50 N/cm for listed non-conductive types; ≥100 N/cm for reinforced grades
Elongation	Typically ≥12%; reinforced non-conductive grades ≥16%
Slit width	10–500 mm
Roll OD / ID	Max. OD 400–800 mm; ID 76, 102, 152 mm

The website lists several constructions and model codes. Specifications depend on tape type and model; request the exact datasheet before engineering approval.

View official JGILI product information

Water Blocking Fiberglass Tape



PRODUCT OVERVIEW

Non-woven fiberglass tape reinforced with superabsorbent polyacrylate resin. Combines water-blocking performance with mechanical reinforcement for demanding cable environments.

APPLICATIONS

Fiber optic, electric power and control cables; longitudinal or helical wrapping around cable cores or fiber-optic tubes.

KEY FEATURES

Water absorption, mechanical reinforcement and customizable widths and thicknesses.

PUBLISHED TECHNICAL INFORMATION

Parameter	Published value
Standard thickness	0.30 mm
Optional thicknesses	0.20 / 0.25 / 0.40 / 0.50 mm
Basis weight	345 g/m² ±5%
Warp yarn count	136 tex
Weft yarn count	102 tex
Swelling speed	300% / 1 min (Gili Test 4)
Swelling height	450% / 3 min (Gili Test 4)
Slit width	20–100 mm
Maximum roll OD	600 mm
Core ID	76 or 152 mm

Thermal and electrical properties are reproduced as published on the JGILI page; confirm the applicable test standard and interpretation with JGILI.

View official JGILI product information

Polyester & Aramid Ripcords



PRODUCT OVERVIEW

High-tenacity polyester and aramid ripcords designed to enable controlled separation or tearing of cable jackets during installation and maintenance.

APPLICATIONS

Cable jacket opening and separation across different cable types.

KEY FEATURES

100% polyester or 100% aramid constructions; high tensile strength; customizable formats and special coatings.

PUBLISHED TECHNICAL INFORMATION

Aramid grade	1,100 Dtx × 3-c	1,670 Dtx × 2-c	3,300 Dtx × 3-c
Tensile strength (N)	580	595	1,680
Elongation (%)	2.6	2.6	2.5
Diameter (mm)	1.2	1.3	2.3
Polyester grade	1,800 Dtx	2,200 Dtx	3,300 Dtx
Tensile strength (N)	156	420	655
Elongation (%)	16	16	16

Grade values are taken from the published product tables. Confirm the selected construction and coating with the manufacturer.

View official JGILI product information

Cotton Filler Cords



PRODUCT OVERVIEW

Non-conductive filler cords used to maintain cable roundness, stabilize internal components and reduce movement within multi-core cable constructions.

APPLICATIONS

Fiber optic, telecommunications and low-, medium- and high-voltage power cables; central cable members.

KEY FEATURES

Cotton/polyester blends; options using recycled cotton; optional waterproof or flame-retardant coatings; customizable diameters.

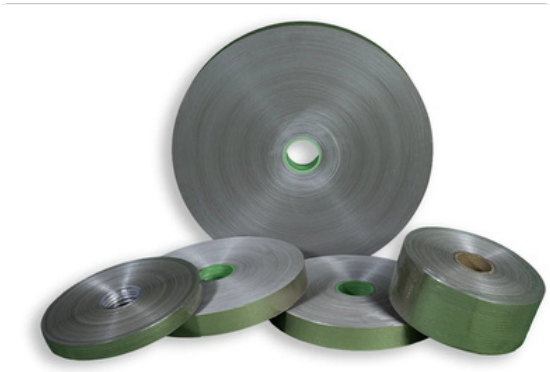
PUBLISHED TECHNICAL INFORMATION

Parameter	1.6 mm	2.0 mm	3.0 mm	4.0 mm	5.0 mm	6.0 mm	8.0 mm
Tensile strength (N)	86	98	243	352	470	710	1,100
Elongation (%)	9.7	9.7	12.1	12	13	11	11
Diameter (mm)	1.6	2.0	3.1	4.0	5.0	6.0	8.0
Shrinkage (%)	4	4	4	4	4	4	4

Published compositions include 85/15 cotton/polyester, 67/33 cotton/polyester and 50/50 recycled cotton/polyester.

View official JGILI product information

Mica Tape



PRODUCT OVERVIEW

Phlogopite and muscovite mica tapes used as fire-resistant electrical insulation barriers. Designed to help maintain cable circuit integrity under high-temperature exposure.

APPLICATIONS

Fire-resistant power, control, instrumentation, signal, marine and submarine cables.

KEY FEATURES

Reinforced with high-temperature silicone resin; zero-halogen emission stated by JGILI; phlogopite and muscovite grades.

PUBLISHED TECHNICAL INFORMATION

Parameter	Phlogopite range
Thickness	0.10–0.14 mm
Basis weight	132–200 g/m^2
Tensile strength	>120 N/cm
Breakdown voltage	1.0–1.5 kV/layer
Fire grade	900°C for 3 hours (listed grades)
Slit width	6–100 mm
Maximum roll OD	400–600 mm
Core ID	76 mm

The page also lists muscovite variants and additional specifications. Fire-test requirements and compliance must be confirmed for the target cable standard.

View official JGILI product information

Flame Retardant Tape



PRODUCT OVERVIEW

Flame-retardant technical tape for cable separation, binding and protective layers. The published product page describes polyester non-woven fabric with halogen-free flame-retardant adhesive.

APPLICATIONS

Power, control and signal cables; industrial buildings; railway infrastructure; tunnels; subways and data-center environments.

KEY FEATURES

Self-extinguishing properties; designed for cable fire-barrier and separation applications; customizable.

PUBLISHED TECHNICAL INFORMATION

Parameter	FR-NWT 110	FR-NWT 150
Thickness	0.20 mm	0.20 mm
Basis weight	110 g/m²	160 g/m²
Tensile strength	≥25 N/cm	≥25 N/cm
Elongation	≥10%	≥10%
Limited Oxygen Index	≥26% 20–	≥30%
Slit width	500 mm	
Maximum roll OD	480–800 mm	
Core ID	76, 102, 152 mm	

The page also references UL 510 and IEC 60454. Verify product-specific approvals and current test reports with JGILI before making compliance claims.

View official JGILI product information

Non- & Semi-Conductive Binding Tapes



PRODUCT OVERVIEW

Non-woven and woven technical binding tapes for shielding, separating and binding conductors and cable cores. Available in non-conductive and semi-conductive constructions.

APPLICATIONS

Power cable conductor binding, shielding and separation; cable core assembly.

KEY FEATURES

Polyester non-woven constructions; semi-conductive versions may incorporate carbon black; customizable slit widths.

PUBLISHEDTECHNICAL INFORMATION

Parameter	Published range
Thickness	0.04–0.35 mm across listed models
Basis weight	20–150 g/m^2 across listed models
Tensile strength	≥20–≥150 N/cm across listed models
Elongation	≥10–≥16% depending on construction
Short-term stability	Up to 230°C (listed grades)
Long-term stability	145°C (listed semi-conductive grades)
Surface resistance	≤1,500 Ω (listed semi-conductive grades)
Slit width	20–100 mm
Maximum roll OD	600 mm
Core ID	76 or 152 mm

Specifications vary by model code and construction. The product page includes model-specific tables.

View official JGILI product information

Technical inquiries & next steps

Forquotations,samples,productselection anddetailedtechnicaldocumentation, contact JGILI directly. To support an accurate recommendation, include the cable type, application, construction, required dimensions, target performance, applicable standards and estimated annual demand.

JGILI – Juan Gili S.L. **Spain**	**Website** **https://jgili.com/**
Sales inquiries **juangili@jgili.com**	**Product information** **JGILI Product Portfolio**

Important technical and commercial notice

Product descriptions and technical values in this catalog are summaries of information publicly available on jgili.com at the time of preparation. Values may vary by model, grade, production lot, test method and customer specification. Some product families do not have a complete numerical specification reproduced here. Always request the latest controlled datasheet and written confirmation from JGILI before design-in, qualification, purchasing or compliance decisions.

Source: JGILI official website and individual product pages. Prepared October 2026.