

AxisOVERSEAS
exceeding expectations

**NEXT - GENERATION
INSULATION SOLUTIONS**

When innovation
demands expertise,
we deliver.





AxisOVERSEAS
exceeding expectations

What we do

Barley Insulation Paper Product Range

Engineered for Next-Generation Performance



Axis Overseas is one of the largest producers of Barley Insulation Paper Products with utmost international standards which ensures your end product will adhere to the highest standards of quality. Our commitment to excellence is reflected in the quality of our products. As a result, we have established a strong presence in the industry.

We offer a complete package of insulation solutions to the Solar Power, Lighting Industry & Lithium-ion Battery packs manufacturers in India. Our products are trusted by the industry leaders.

At Axis Overseas, we are committed to providing our customers with High - Quality products, exceptional customer service and innovative solutions that meet their unique requirements.

We ensure our customers with swift customization & uninterrupted quick supplies in any part of the country.

Technical Key Facts of Fish / Barley Paper

Technical Overview

Barley insulation paper is generally considered **RoHS** rated (Restriction of Hazardous Substances) compliant because it is primarily made from natural, vulcanized fiber—essentially pure cellulose, wood, or cotton fibers. It is widely used for insulation in electronic components like Lithium-ion Batteries and motors due to its environmentally friendly and non-toxic nature.

Key RoHS and Safety Characteristics

- **Material Composition:** Primarily natural cellulose/cotton fiber, which does not contain hazardous substances like lead, mercury, or cadmium.
- **Compliance:** As a vulcanized fiber product, it aligns with environmental safety standards required for electronics.
- **Usage:** Commonly used in electric vehicles, lithium battery packs, requiring compliance with environmental regulations.

Green UL-rated insulation paper, often referred to as Barley Paper or Fish Paper, is a popular high-performance electrical insulating material, it features a single-side adhesive coating, making it ideal for lithium-ion battery pack assembly, particularly on cell terminals, due to its exceptional dielectric strength, flexibility, heat resistance, it acts as a thermal insulator. It is typically made from rag stock or high-quality wood fiber, pure cellulose and vulcanized fiber impregnated with resin, for enhanced durability resistant to corrosion, wear and tearing.

Key Features and Types of Fish/Barley Paper

- **Fish / Barley Paper:** A durable, flexible paper often used as insulating gaskets or slot liners, featuring excellent mechanical strength FDR Green Insulating Flexible Paper: Often categorized by "Class" (e.g., E, F or H Class) and mils (thickness), commonly available in 5, 7 & 10 mils.
- **Composite Insulation Paper (DMD/Green Shell):** Combines green paper with polyester film, enhancing thermal and electrical insulation performance.
- **Adhesive-Backed Options:** Green insulation papers come with a self-adhesive backing for simplified application in battery manufacturing.
- **Lamination with Adhesive backing :** Barley insulation paper can be additionally laminated with Polyethylene Terephthalate (PET) film or Polyimide (PI) film to augment its thermal endurance, dielectric strength, and mechanical tensile properties for high-reliability applications.

Applications

- ▶ **Battery Pack Assembly:** Used on the negative & positive points of the lithium-ion cells to shields and protect from anti Interference, wear resistance and it provides protection while welding the nickel tabs to the terminals.
- ▶ **Motor & Transformer:** Used as slot insulation, winding insulation, gasket and gap material.

Barley Insulation Paper Technical Briefings

Material	:	Fish / Barley Paper is a type of Vulcanized Fiber. It is made from pure cellulose, natural wood, and cotton fiber.
Color	:	Barley insulation paper is actually typically green in colour due to its composition and manufacturing process. The green colour comes from the natural pigments present in the raw materials.
Thickness	:	Bare paper thickness: 5 mil is approx. 0.12 mm in thickness with a weight of 120 gsm 7 mil is approx. 0.17 mm in thickness with a weight of 170 gsm 10 mil is approx. 0.25 mm in thickness with a weight of 250 gsm Average thickness variation is 10% to 15%
Temperature Resistance	:	130°C & can sustain up to 250°C blowing temperature.
Insulation	:	Considered as Class E insulation standards. It has excellent electrical insulation properties on low voltage and also acts as a thermal insulator.
Technical Specifications	:	IEC 60641 (Class 3)
Features	:	Reduces heat transfers, moisture absorptions, oil resistance, high elasticity, high mechanical strength, enriched with dielectric properties. It has superb sealing properties, flexibility considered to be more than plastics at medium temperatures.
Tensile Strength	:	10.4 Mpa
Adhesive Coating Properties	:	It's an acrylic-based emulsion featuring strong initial tack, high temperature resistance, and shearing strength lasting over 100 hours. Provides outstanding results after 24 hours of application.
Applications	:	1. Barley insulation paper self-adhesive rolls are widely used for lithium-ion battery packs and for automatic cell paper pasting machines. 2. Barley insulation paper stickers are commonly used on lithium-ion cell terminals.

TDS Cellulose Insulation (Green) 5.0 MIL

S.No	Properties	Unit		Test Results
1.	Actual Substance	Mm		0.12
2.	Density	Gm/cc		0.97
3.	Burst Factor	(gf/Cm ²)/(g/m ²)		36.0
4.	Tear Factor	gf/(g/m ²)	MD CD	115 144
5.	Tensile Strength (in 15 mm Strips)	Kg/Cm ²	MD CD	10.48 4.20
6.	Breaking Length	Meter	MD CD	5062 2028
7.	Stretch	%	MD CD	1.11 1.11
8.	Break Down Voltage	KV		2.0
9.	Smoothness (Bendtsen)	ML/min	Top Side Bottom Side	40-55 55-65
10.	Gloss (at 75 Degree Angle)	%	Top Side Bottom Side	32-36 28-32
11.	Cobb Value	Gm/m ²		35
12.	Stiffness Value	Taber	MD CD	20 15
13.	Moisture	%		7.0
14.	Ash Content	%		1.68
15.	Aqueous pH	-		7.5

TDS Cellulose Insulation (Green) 7.0 MIL

S.No	Properties	Unit		Test Results
1.	Actual Substance	Mm		0.17
2.	Density	Gm/cc		0.96
3.	Burst Factor	(gf/Cm ²)/(g/m ²)		26.0
4.	Tear Factor	gf/(g/m ²)	MD CD	122 132
5.	Tensile Strength (in 15 mm Strips)	Kg/Cm ²	MD CD	12.7 6.33
6.	Breaking Length	Meter	MD CD	4363 2175
7.	Stretch	%	MD CD	1.66 2.77
8.	Break Down Voltage	KV		1.5
9.	Smoothness (Bendtsen)	ML/min	Top Side Bottom Side	40-45 50-55
10.	Gloss (at 75 Degree Angle)	%	Top Side Bottom Side	35-40 30-35
11.	Cobb Value	Gm/m ²		34
12.	Stiffness Value	Taber	MD CD	25 15
13.	Moisture	%		7.0
14.	Ash Content	%		1.68
15.	Aqueous pH	-		7.5

TDS Cellulose Insulation (Green) 10.0 MIL

S.No	Properties	Unit		Test Results
1.	Actual Substance	Mm		0.25
2.	Density	Gm/cc		0.90
3.	Burst Factor	(gf/Cm ²)/(g/m ²)		23.8
4.	Tear Factor	gf/(g/m ²)	MD CD	108 125
5.	Tensile Strength (in 15 mm Strips)	Kg/Cm ²	MD CD	19.19 9.72
6.	Breaking Length	Meter	MD CD	4520 2289
7.	Stretch	%	MD CD	1.11 1.19
8.	Break Down Voltage	KV		1.92
9.	Smoothness (Bendtsen)	ML/min	Top Side Bottom Side	35-50 50-60
10.	Gloss (at 75 Degree Angle)	%	Top Side Bottom Side	30-35 25-30
11.	Cobb Value	Gm/m ²		31
12.	Stiffness Value	Taber	MD CD	81 46
13.	Moisture	%		7.0
14.	Ash Content	%		1.68
15.	Aqueous pH	-		7.5

Expanding Our Insulation Solutions Portfolio

Axis Overseas continues to set benchmarks for quality and reliability in the Lithium-ion battery industry through our Premium Barley Insulation Paper Products Range. Building on the proven success across India.

We are proud to unveil an expanded offering:

New Offering	Major Advantages	Ideal For
Economy Range of Barley Insulation Paper Products	Cost-effective without compromising on Quality	Low Cost Battery Pack Manufacturers
Ultra-Premium Barley Insulation Paper Products	Ensures Highest Quality of International Standards	Battery Pack Manufacturers for OEM'S
Polyester Insulation Stickers	Polyester is a plastic film light in weight, water-resistant, and chemically stable, commonly used for insulating wraps or covering battery	Specific Technical Requirements

This expanded portfolio is designed to serve the full spectrum of the Lithium-ion battery industry, from micro and small enterprises to medium and large-scale manufacturers.

This initiative supports our customers in minimizing dependence on substandard imported materials while ensuring consistent quality, performance, and reliability.

Our goal is to empower customers with high-performance, domestically manufactured alternatives without compromising on safety & durability.



YOUR RELIABLE SOURCE OF INSULATION PRODUCTS

As a valued OEM partner, we understand the importance of optimizing production processes and ensuring the highest quality standards. Our barley insulation products are designed to meet the stringent requirements of the Li-ion battery industry, offering distinct advantages over imported alternatives that can enhance your operations:

Merits of Axis Overseas Products over Imported Products

1. Unparalleled Adhesive Performance

Our products demonstrate exceptional bonding strength, eliminating concerns about adhesive degradation, ensuring a secure bond that doesn't compromise over time. After 24 hours of application, the paper tears rather than releasing from the application, guaranteeing a reliable performance. This has been consistently observed and appreciated by our customers, who have experienced adhesive degradation issues over a period with imported products.

2. Tailored Solutions for Your Needs

With our flexible manufacturing capabilities, we deliver customized insulation products within 72 hours, aligning with your specific design and technical requirements. This agility supports your production schedules and reduces lead times. Imported products often lack this flexibility.

3. Seamless Machine Integration

Our insulation paper rolls are engineered for compatibility with your cell paper pasting machines, minimizing downtime and production losses. Imported rolls can be sticky, causing machine stoppages and productivity losses. This reliability contributes to improved overall equipment effectiveness (OEE) and reduced maintenance costs.

4. Reliable Supply Chain and Inventory Management

We maintain a comprehensive stock of our products, ensuring prompt deliveries and minimizing inventory costs. Our just-in-time supply approach allows you to optimize your inventory levels and reduce working capital requirements. Imported products often involve lengthy lead times, large order quantities, and advance payments, tying up capital and increasing inventory costs.

Continued...

Key Benefits of Switching to Axis Overseas

- Benefits for Your Operations- Enhanced product quality and reliability
- Improved production efficiency and reduced downtime
- Cost savings through optimized inventory management and minimized production losses
- Access to customized solutions tailored to your specific needs

Why Choose Axis Overseas

- Proven track record of delivering high-quality products
- Wide acceptance in the Indian Li-ion battery industry
- Products meet international safety and quality standards
- Dedicated customer support and service
- Competitive pricing, despite being a premium product
- Expert technical support and guidance

Message to the Li-ion Battery Industry

Don't compromise on safety and quality. Choose Axis Overseas, the trusted brand in Barley Insulation Paper products. Say goodbye to the hassles of importing cheap, low-quality paper from other countries. Experience the best-in-class performance and reliability of our products. Join our growing customer base of 1200+ satisfied customers.

Switch to Axis Overseas today...

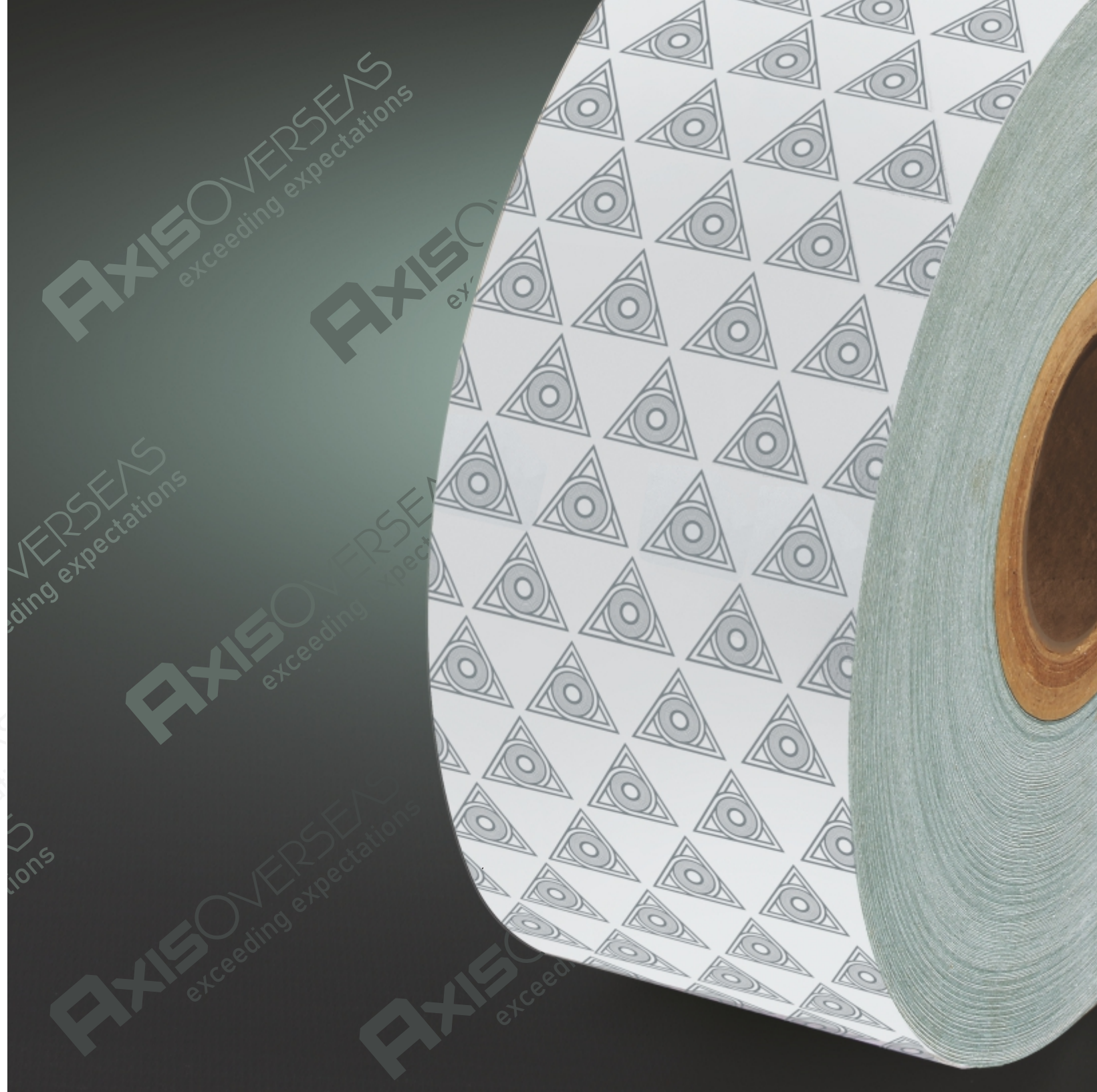


Premium Insulation Paper Rolls

Double-Coated, Double-Sided Acrylic Adhesive Insulation Paper Rolls, specifically designed for Prismatic Cell Battery pack assembly, offering premium quality and reliable performance.

Customization is our USP

We customize these Rolls as per customer's specific size requirements.





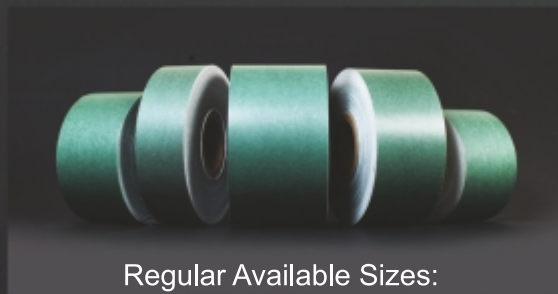
Premium Insulation Paper Rolls

Our high-quality, Self-Adhesive Barley Insulation Paper Rolls cater to the Lithium-ion Battery Industry's specific needs.

Available in a wide range of sizes (50mm to 750mm) these rolls are perfect for diverse applications.

Customization is our USP

We Customize Rolls as per our Customer's specific size requirements.



Regular Available Sizes:
50, 65, 70, 90, 95, 100, 105, 110 & 130mm



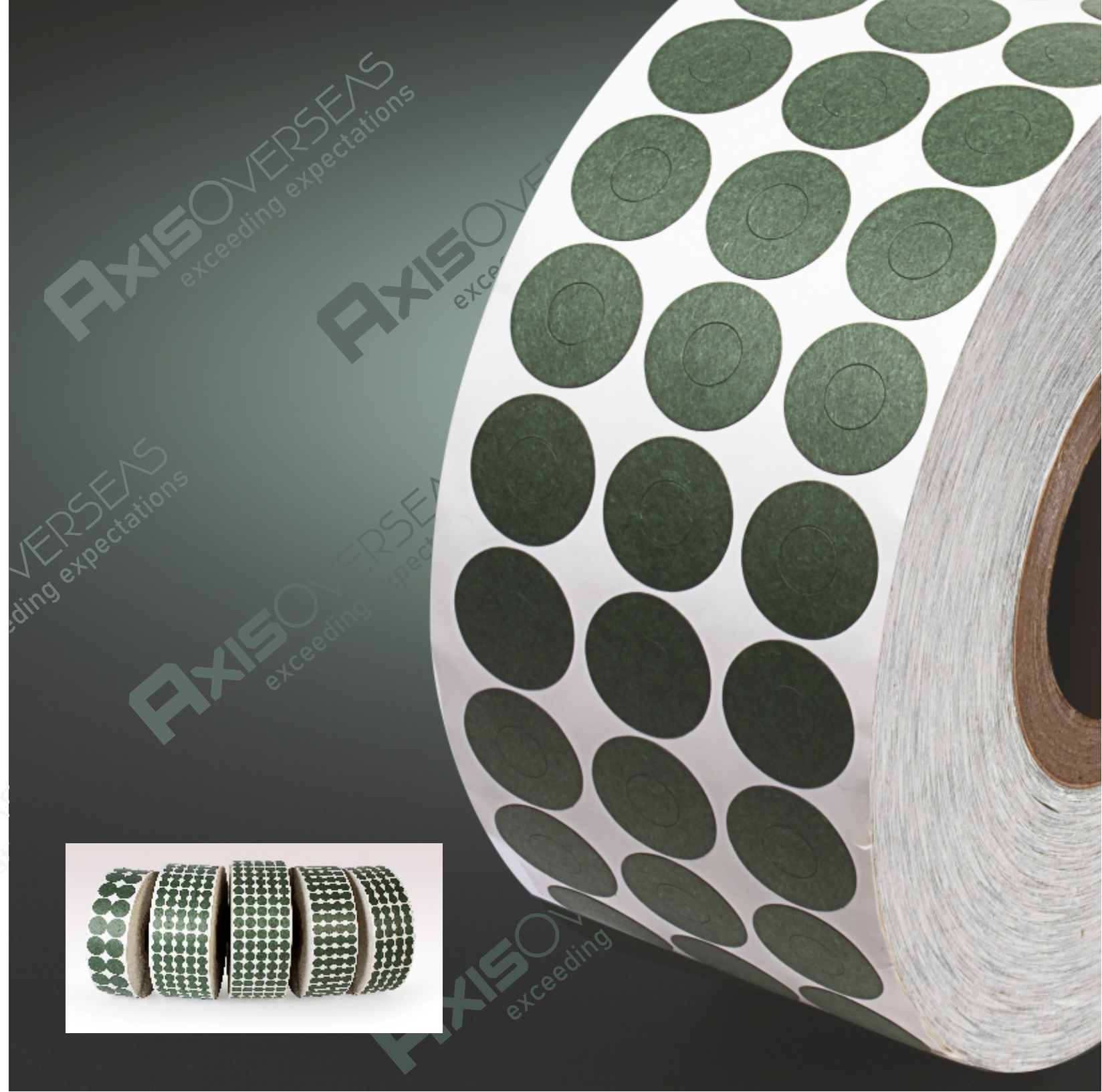


Premium Insulation Paper Stickers

Our comprehensive range of Barley Insulation Paper Stickers for Lithium-ion Battery Cells fits a wide variety of cells sizes commonly used in the Battery Industry.

Customization is our USP

We Customize Cell Stickers as per our Customer's Design specific requirements.



Insulation Paper Stickers Range for Lithium-ion Battery Cells.

Our Barley Insulation Stickers range for Lithium-ion Battery Cells is designed for a wide variety of cell sizes which are being frequently used in the Battery Industry.



Glimpses of Cell Insulation Stickers commonly used in the Battery industry.

10400 NS 10400 PS
10440 NS 10440 PS

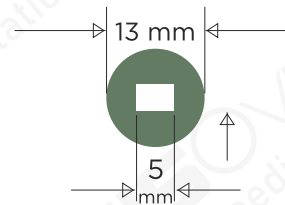
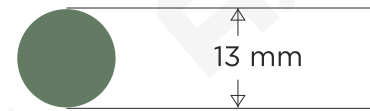


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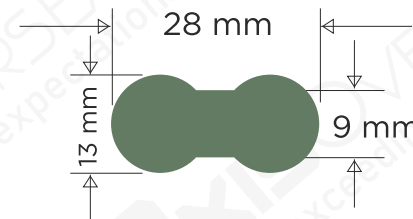
Cell Pictures are for illustrative purposes only to demonstrate the application of our Barley Insulation Paper Products.

14500 NS
14500 PS

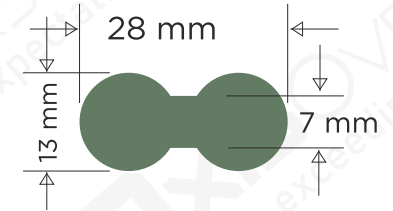


14500 PS
SPOT TYPE

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14500 NS 2P



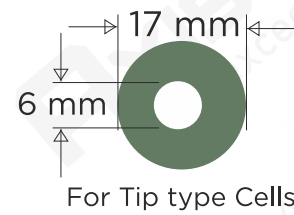
14500 NS 2P



18650 NS
18650 PS



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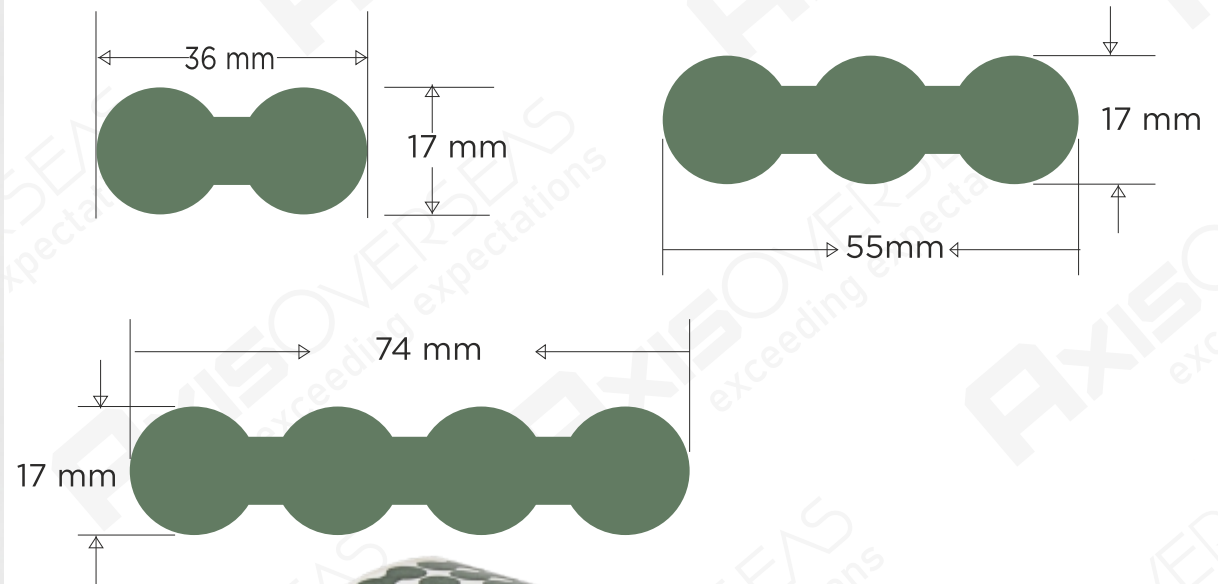
For Tip type Cells



18650 NS 2P 18350 NS 2P
18650 NS 3P 18350 NS 3P
18650 NS 4P 18350 NS 4P



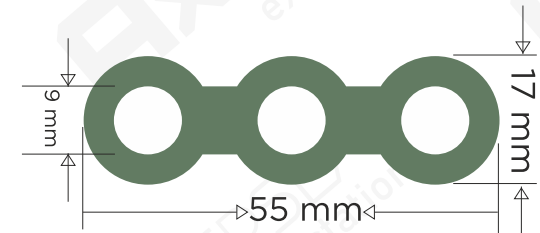
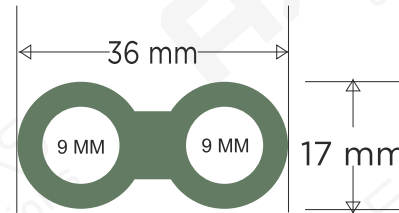
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18650 PS 2P 18350 PS 2P
18650 PS 3P 18350 PS 3P
18650 PS 4P 18350 PS 4P

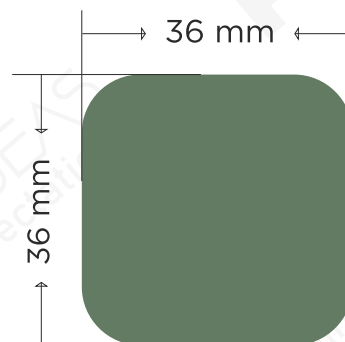


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Customized 18650 NS Cell Stickers Series



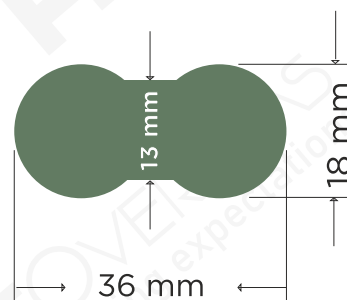
18650 NS 4P
Square Shape



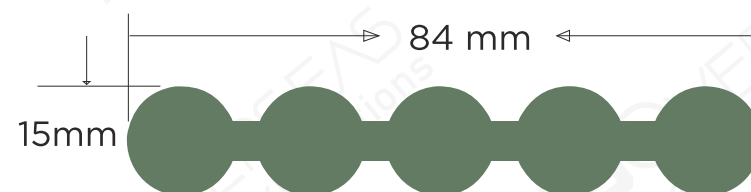
18650 NS 3P
Triangle Shape



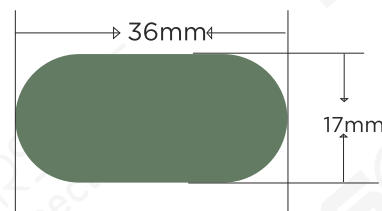
18650 NS 3P
Capsule Shape



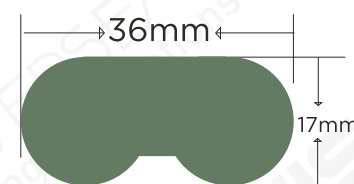
18650 NS 2P



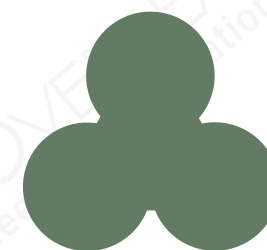
18650 NS 5P



18650 NS 2P
Capsule Shape

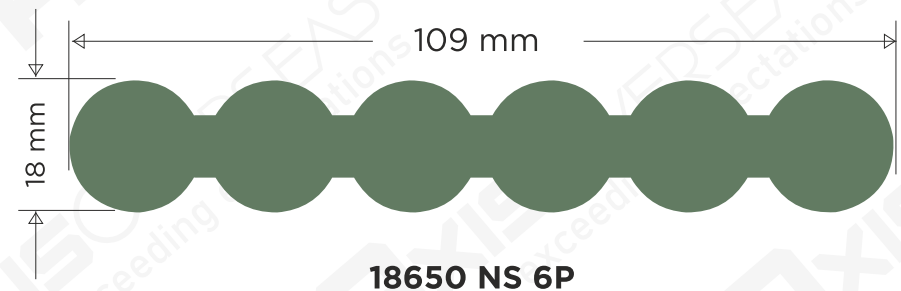
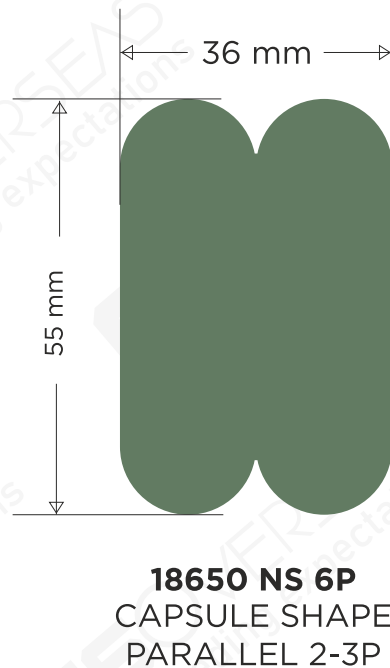
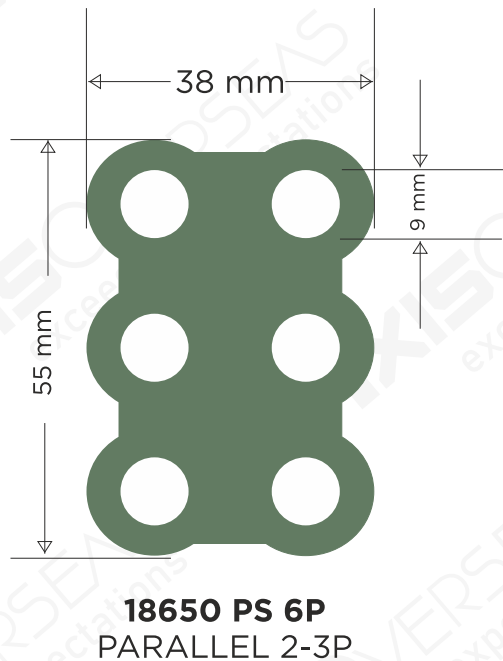
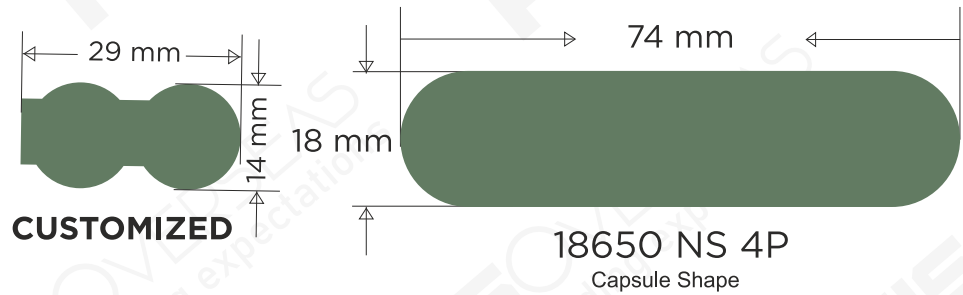
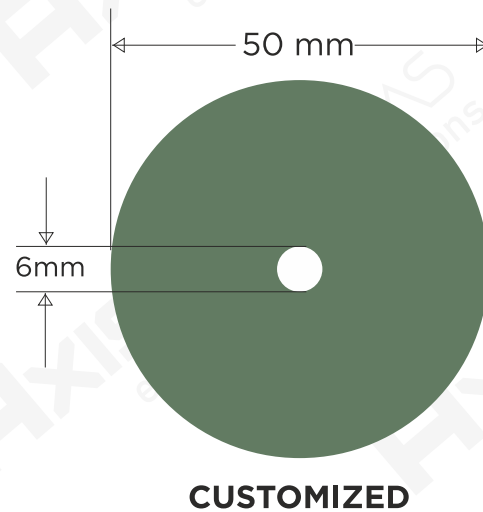


18650 NS 2P
Kidney Shape



18650 NS 3P
Flower Shape

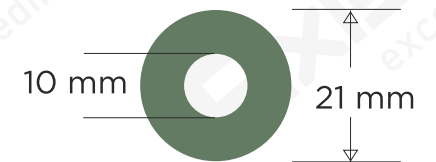
Customized 18650 Cell Stickers Series



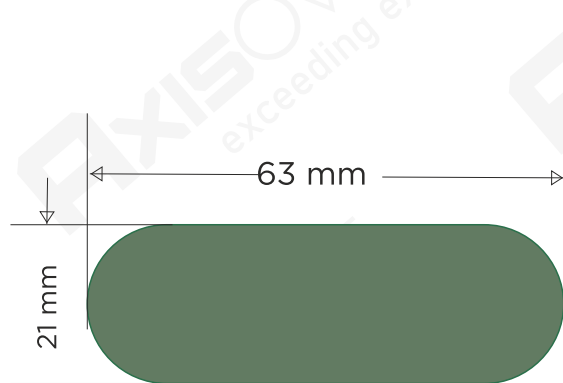
21700 NS
21700 PS



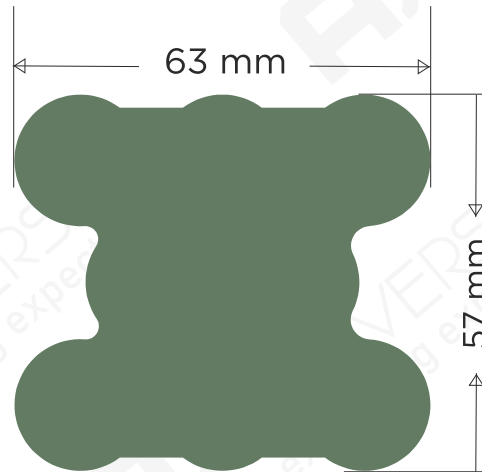
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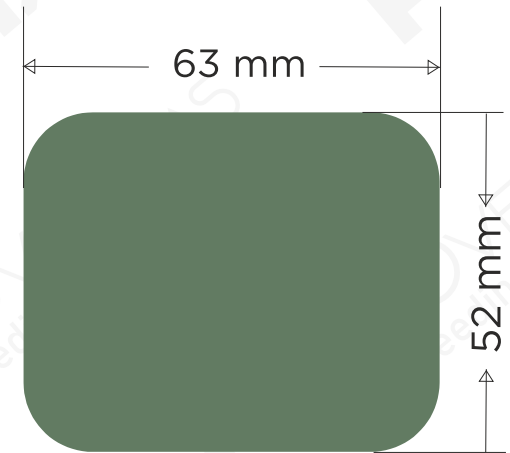
Customized 21700 Cell Stickers Series



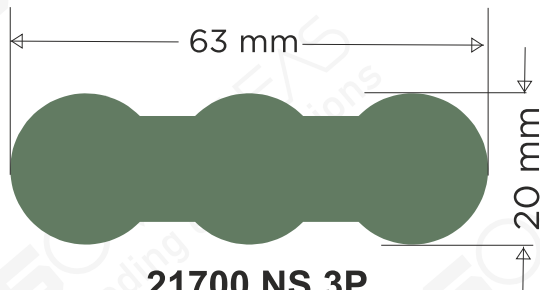
21700 NS 3P
Capsule Shape



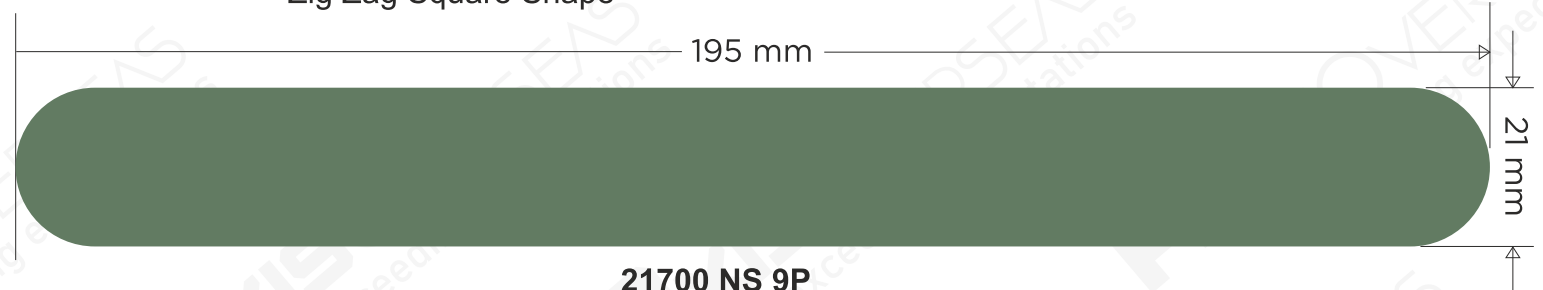
21700 NS 8P
Zig Zag Square Shape



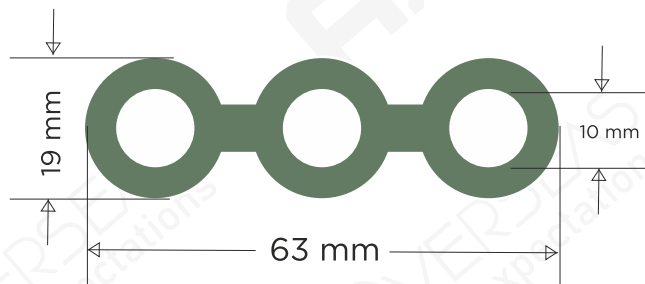
21700 NS 6P



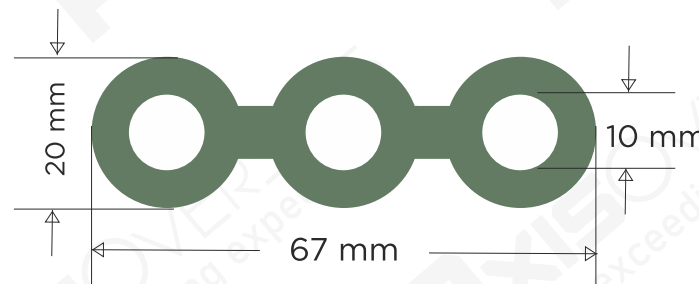
21700 NS 3P
Customized



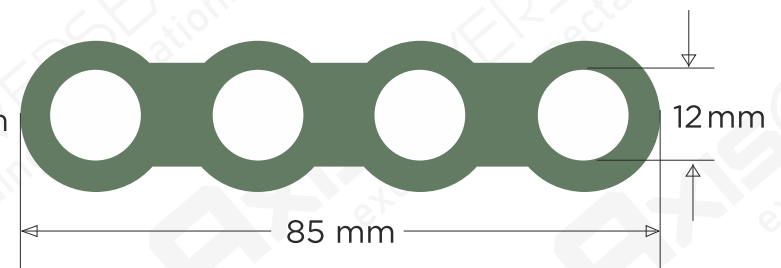
21700 NS 9P
Capsule Shape



21700 PS 3P

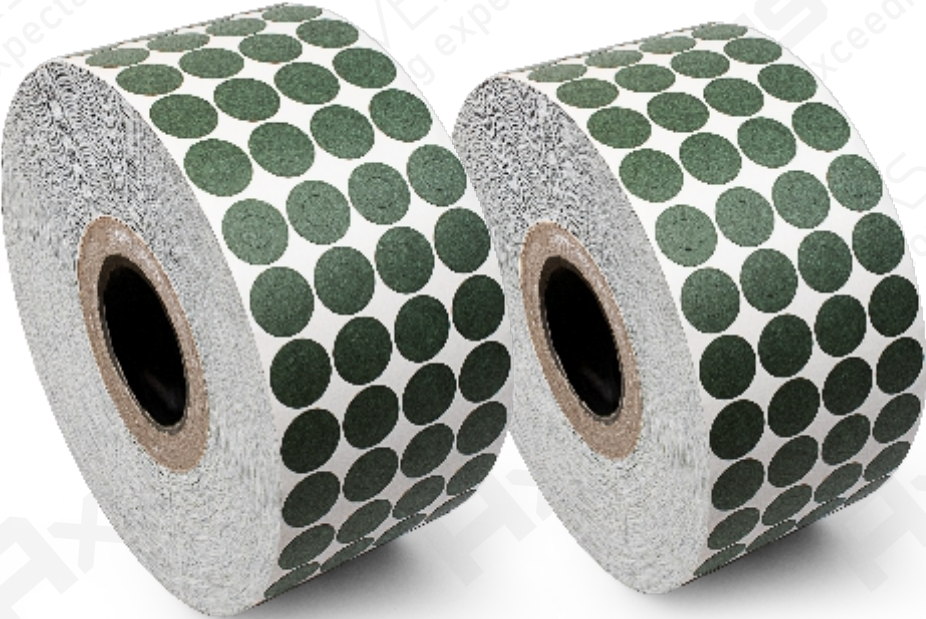
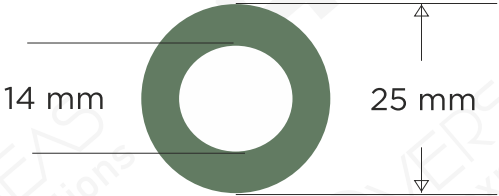
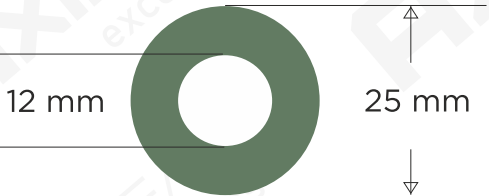
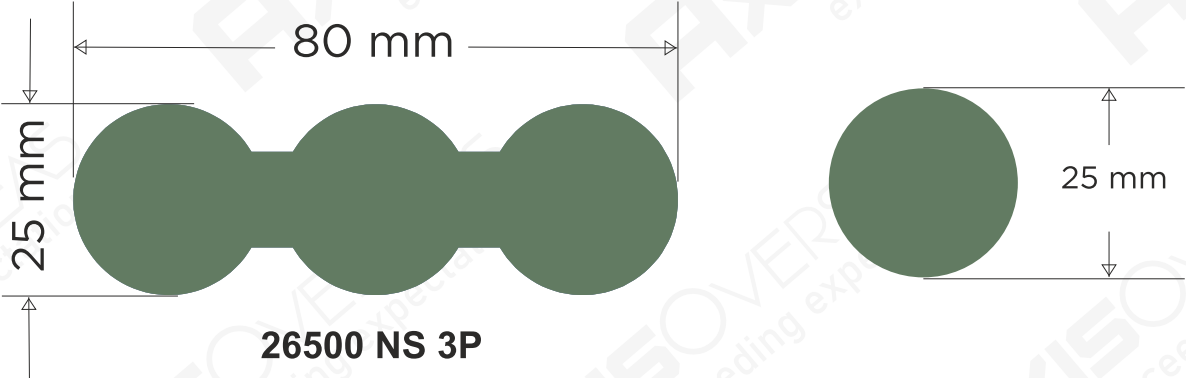


21700 PS 3P
With Cell Holder

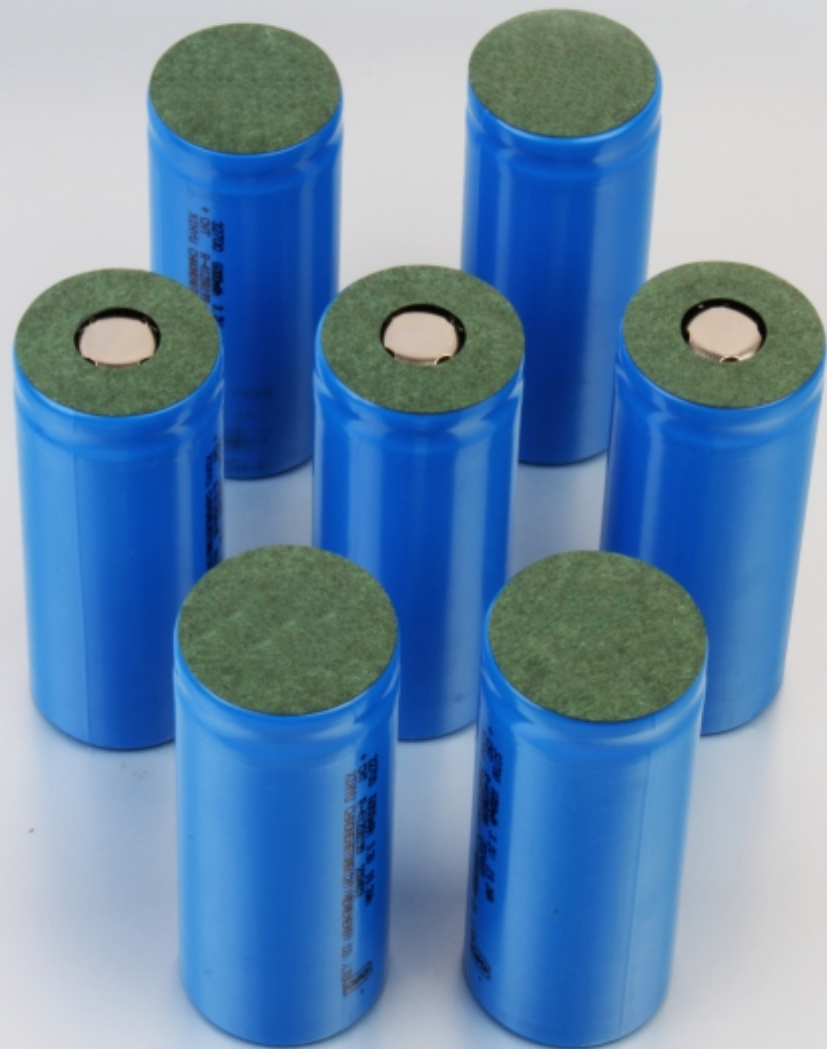


21700 PS 4P

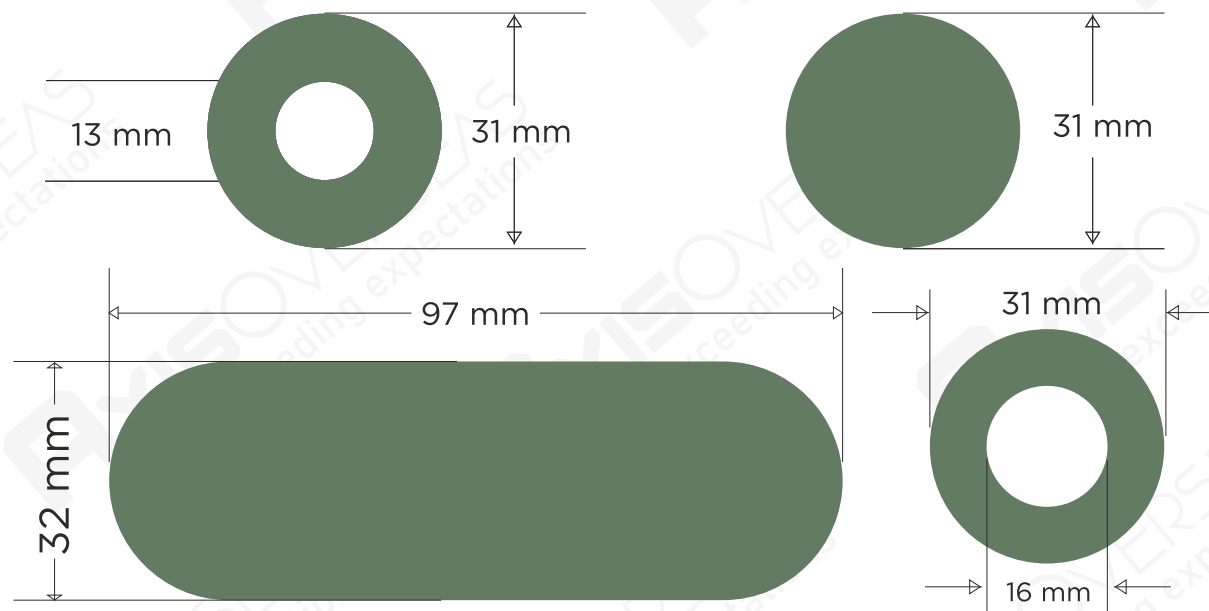
26650 NS 26700 NS
26650 PS 26700 PS



32140 NS 32140 PS
32650 NS 32650 PS
32700 NS 32700 PS



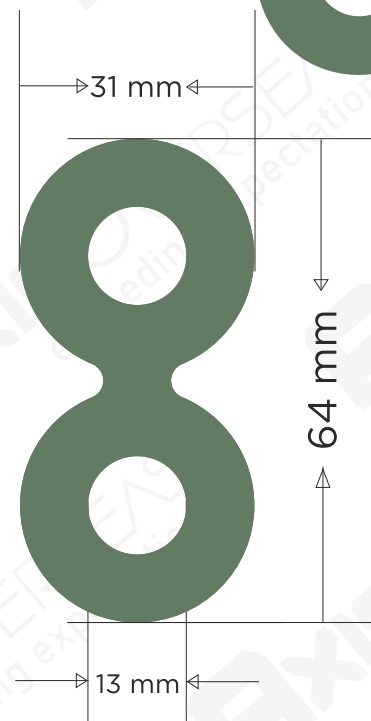
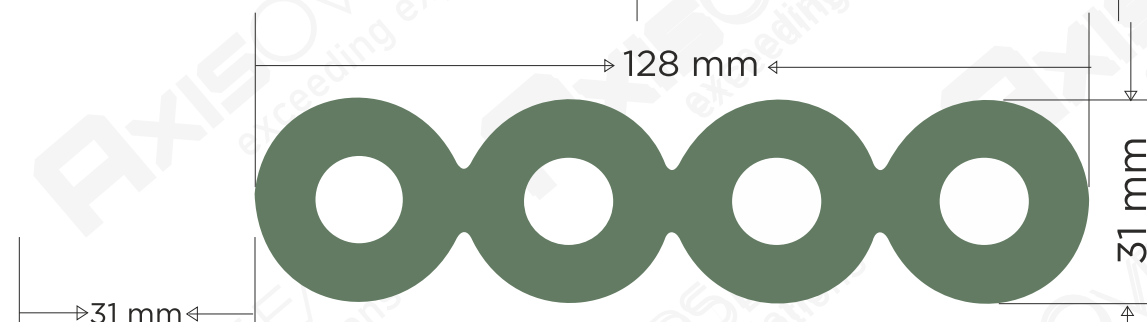
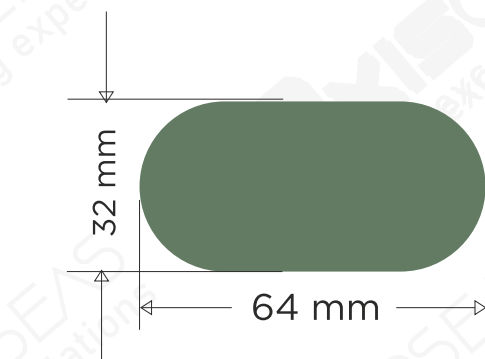
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32700 NS 3P CAPSULE SHAPE

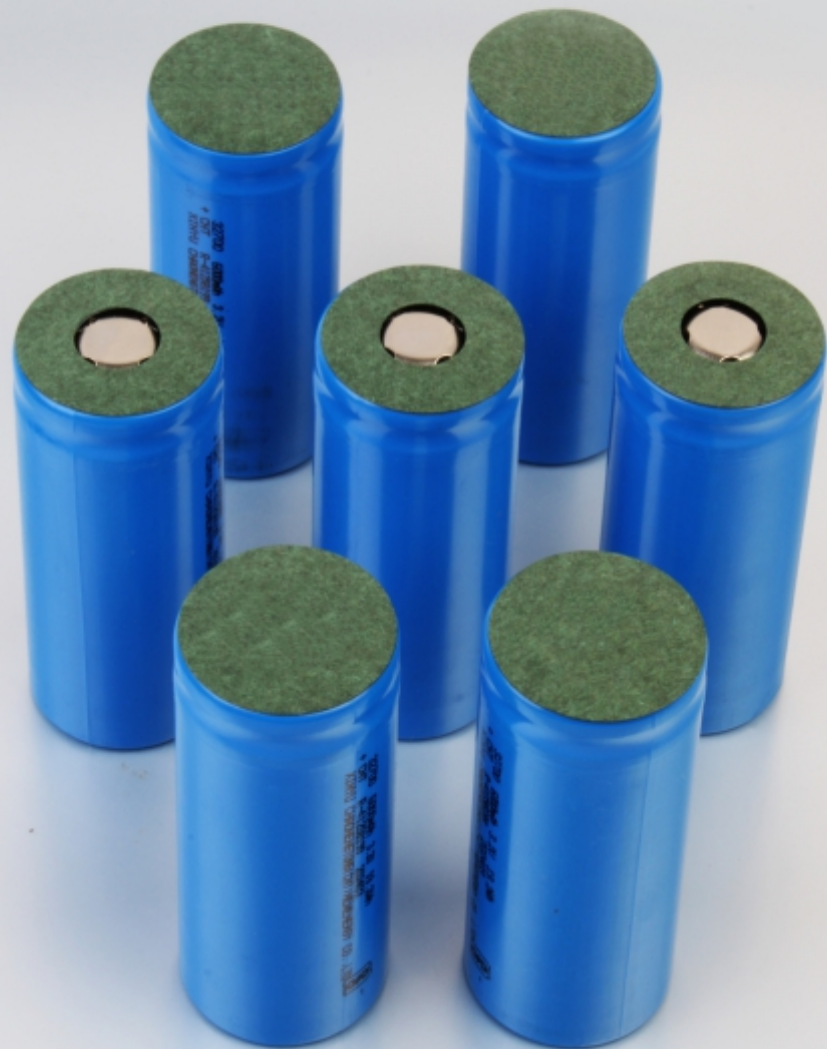


32140 NS 2P 32140 PS 2P
32650 NS 2P 32650 PS 2P
32700 NS 2P 32700 PS 2P



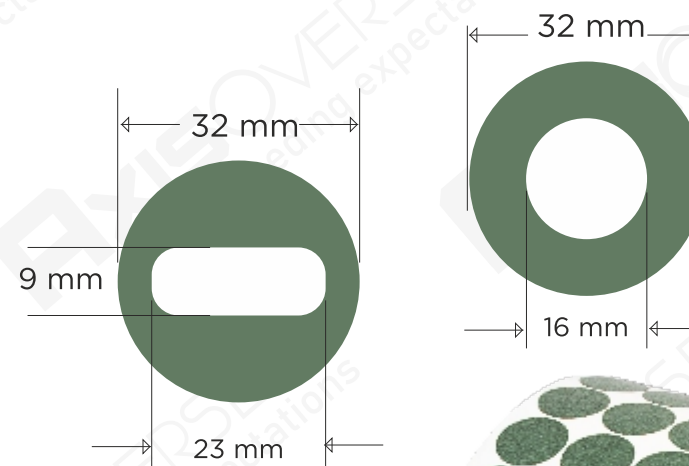
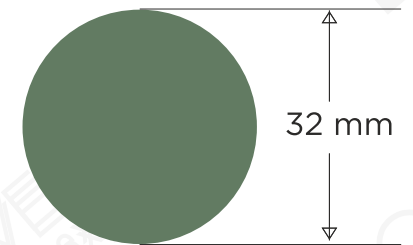
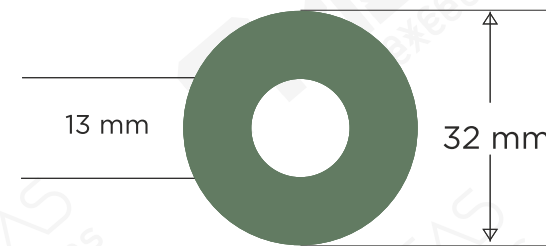
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33140 NS
33140 PS



Cell Pictures are for illustrative purposes only to demonstrate the application of our Barley Insulation Paper Products.

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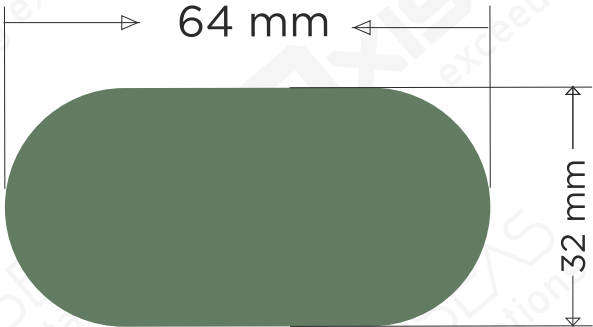
33140 SPOT TYPE



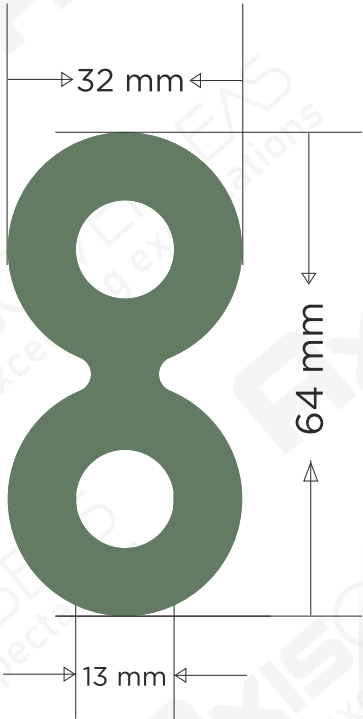
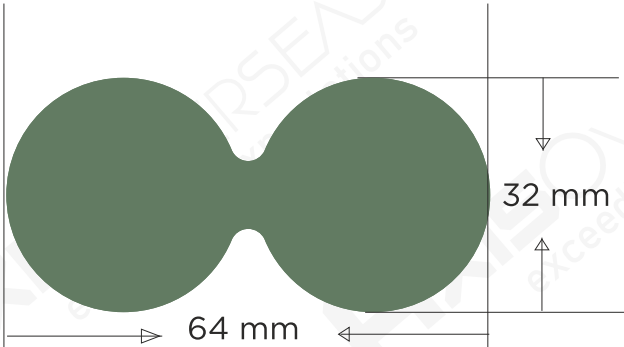
33140 NS 2P
33140 PS 2P



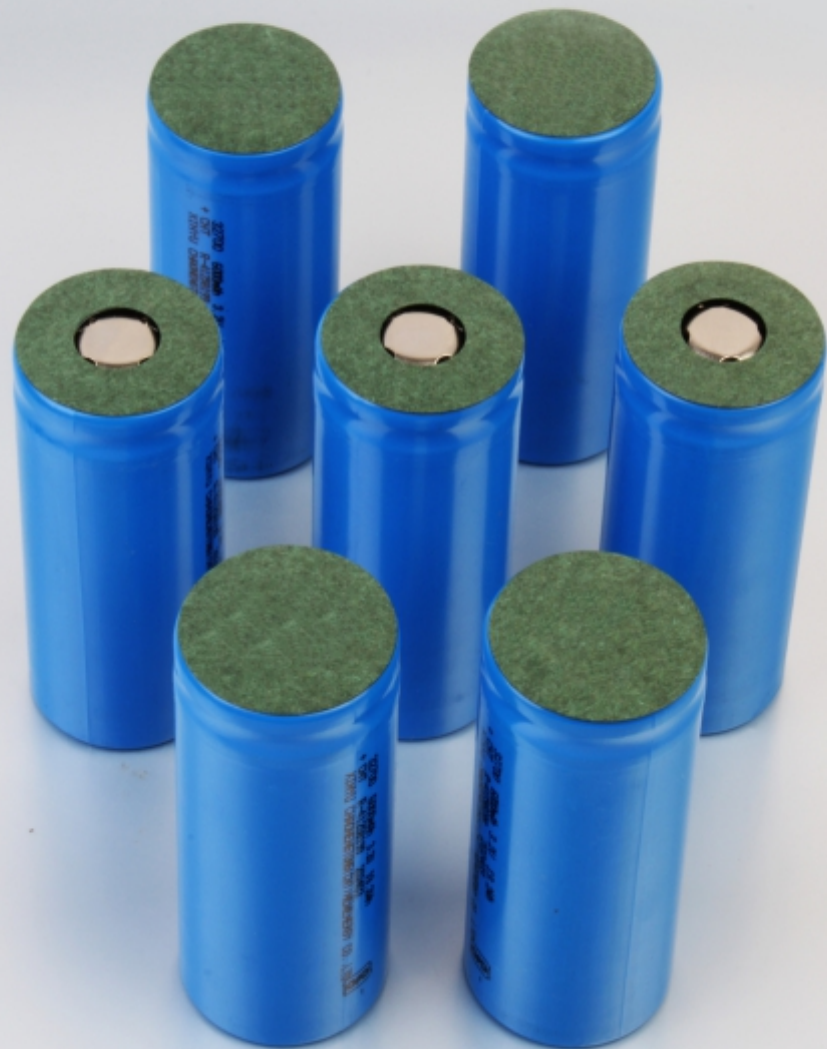
Cell Pictures are for illustrative purposes only to demonstrate the application of our Barley Insulation Paper Products.



33140 NS 2P
Capsule Shape

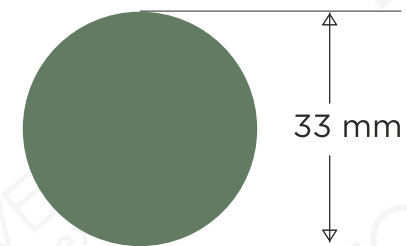
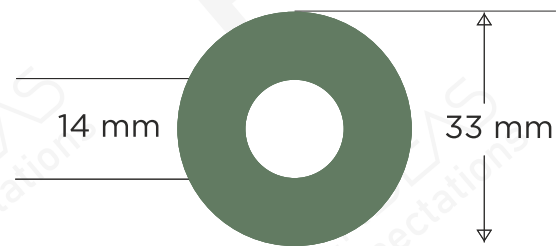


34145 NS
34145 PS



Cell Pictures are for illustrative purposes only to demonstrate the application of our Barley Insulation Paper Products.

AxisOVERSEAS
exceeding expectations

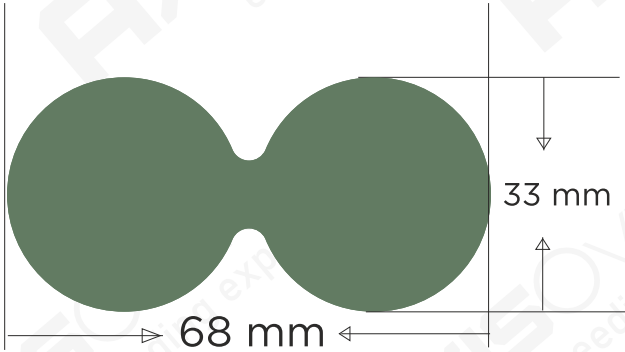
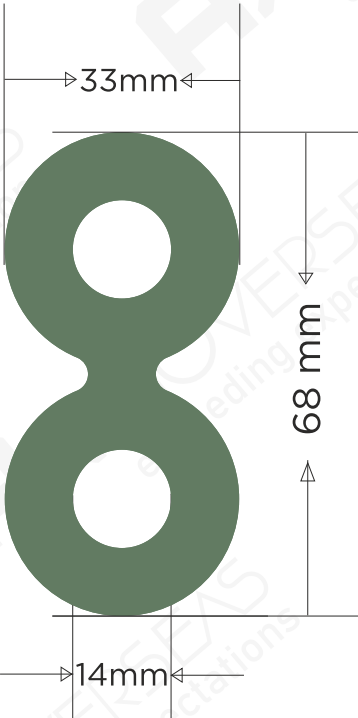


34145 NS 2P
34145 PS 2P

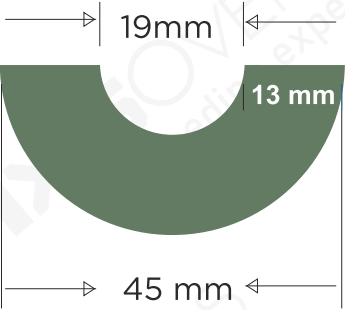
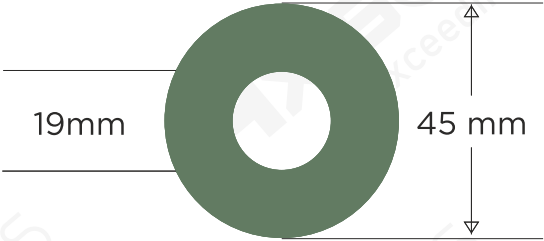
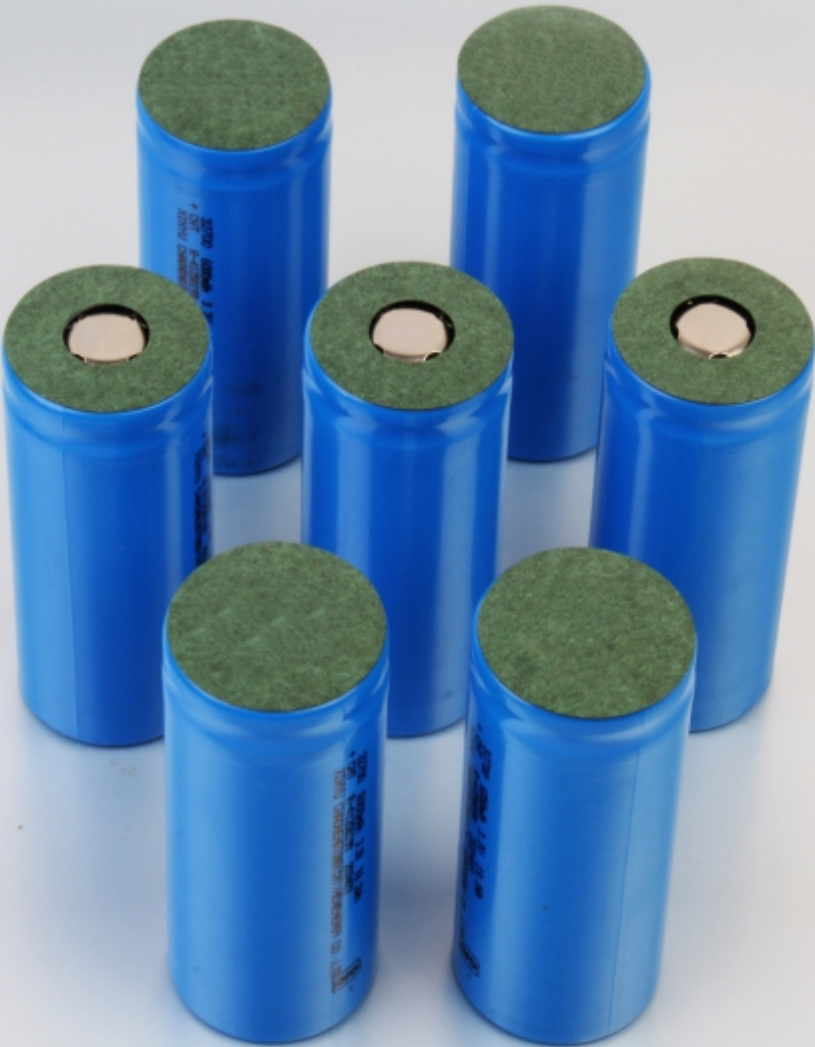


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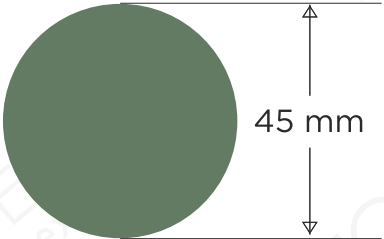


46120 NS 46120 PS
46800 NS 46800 PS



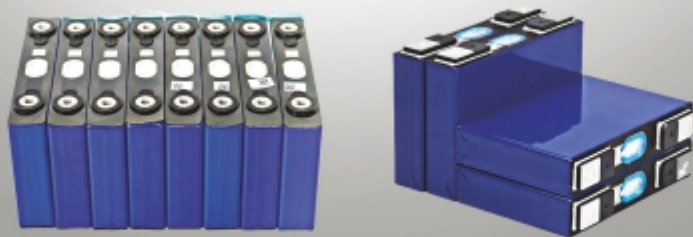
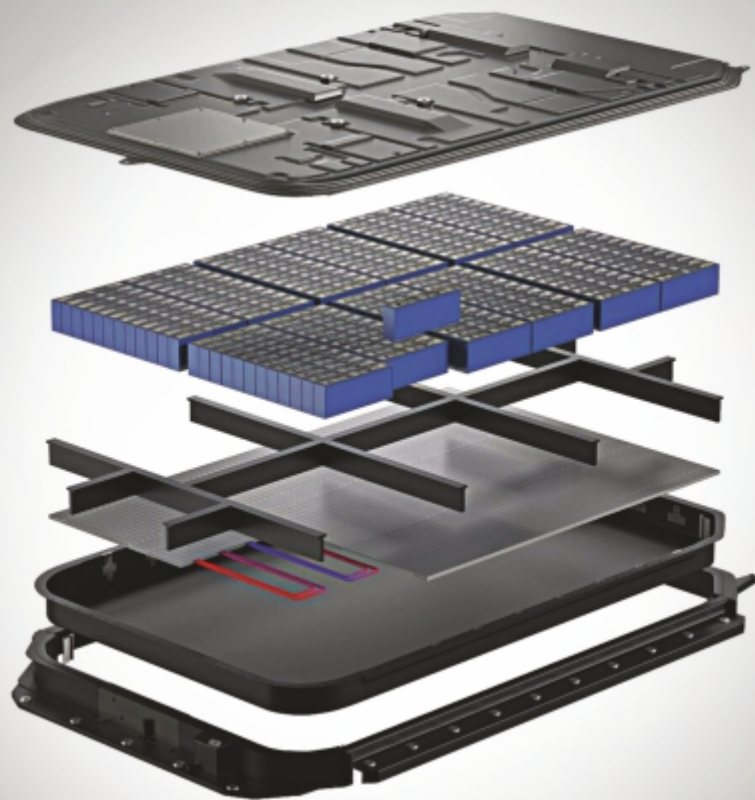
Half Circle Sticker
(Customized)

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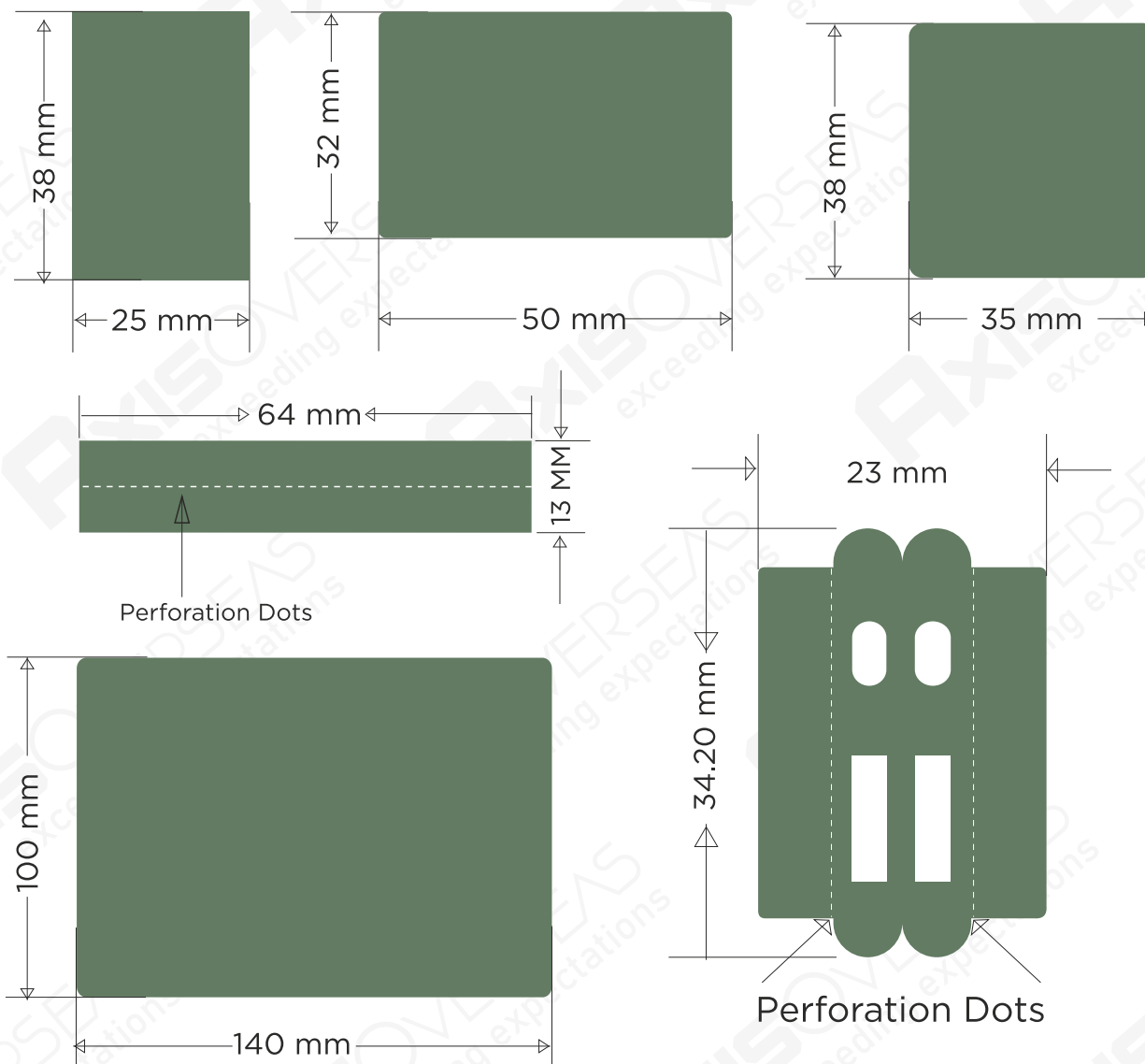
Cell Pictures are for illustrative purposes only to demonstrate the application of our Barley Insulation Paper Products.

Customized Prismatic Cell Stickers



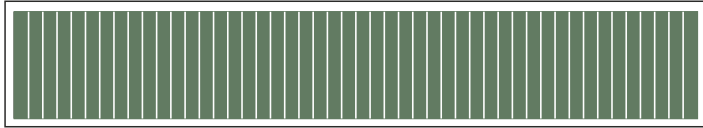
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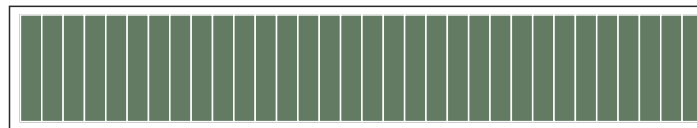


We offer bespoke stickers in variable shapes and sizes, providing engineers with design flexibility for diverse applications.

Customized Insulation Paper Sticker Strips Series for diverse applications



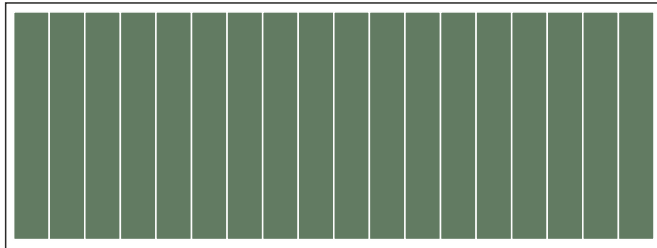
STRIPS 2 mm x 15 mm



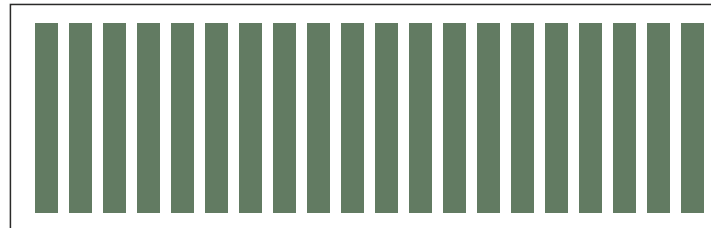
STRIPS 3 mm x 15 mm



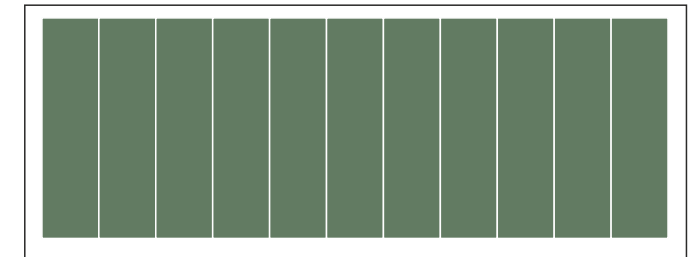
STRIPS 4.2 mm x 18.5 mm



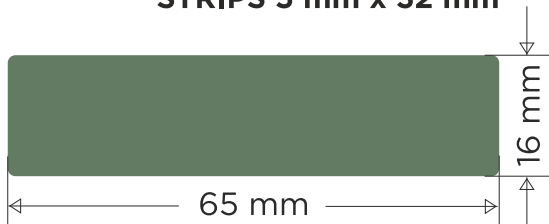
STRIPS 5 mm x 32 mm



STRIPS 3 mm x 25 mm



STRIPS 8 mm x 31 mm



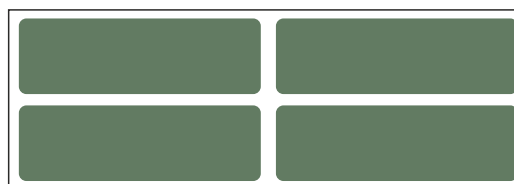
STRIPS 9 mm x 25 mm



STRIPS 8 mm x 16 mm



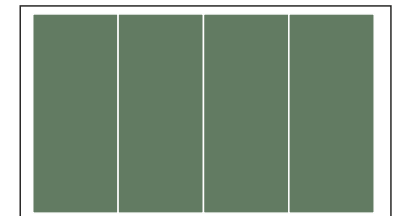
STRIPS 8 mm x 41 mm



STRIPS 10mm x 32 mm

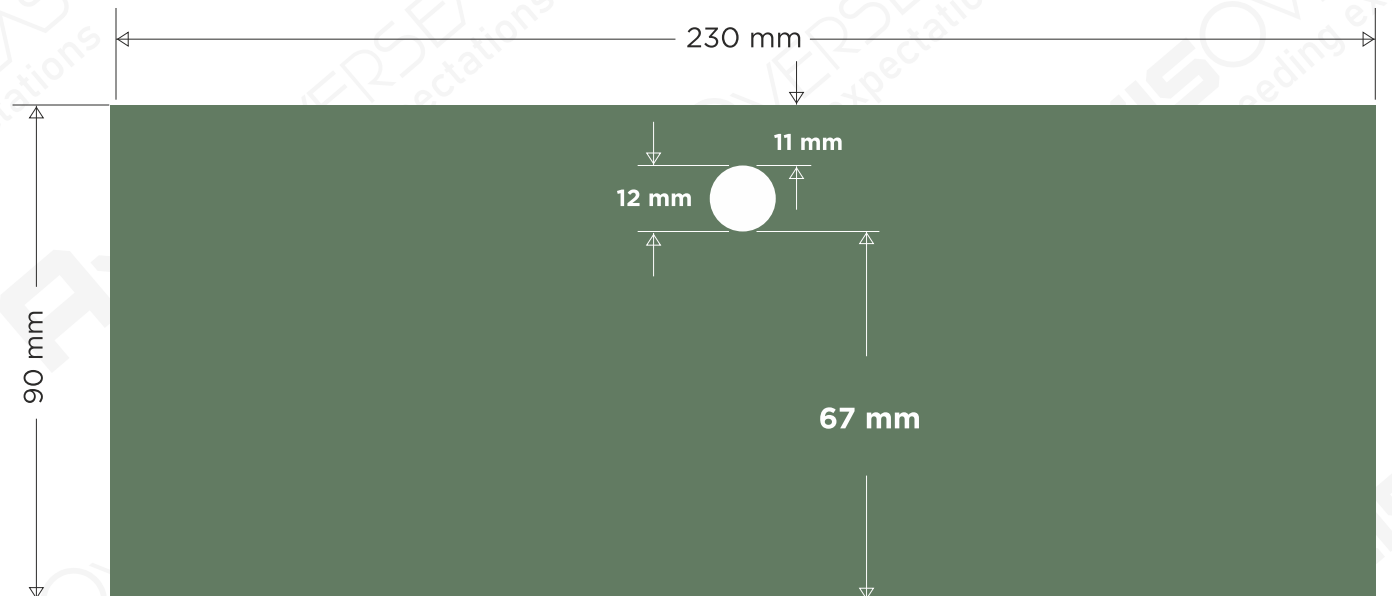
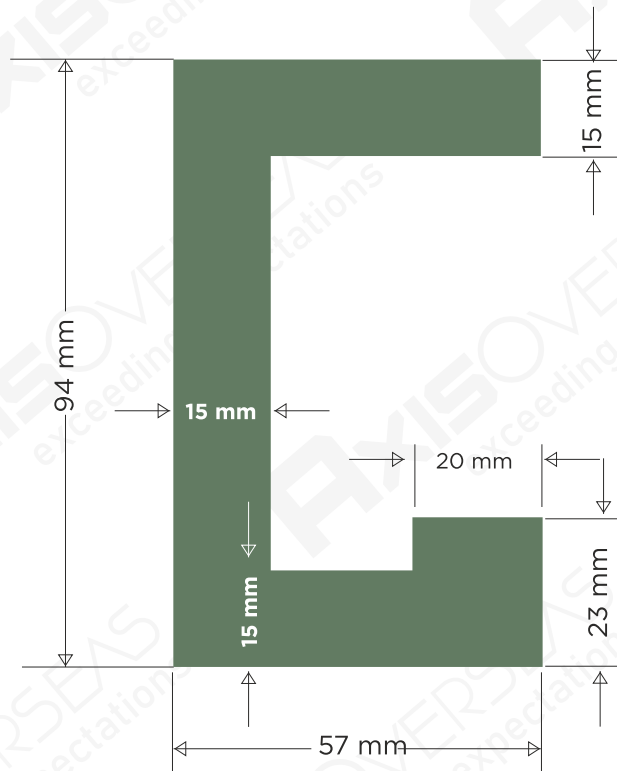


STRIPS 12 mm x 16 mm



STRIPS 12 mm x 28mm

**Setting the new benchmark in Barley
Insulation Paper technology for
critical OEM applications**





LABELS



High-Quality Labels

We specialize in producing a diverse range of plain and printed labels which includes Chromo paper labels & Polyester film labels, catering to various industries and applications.

Customized Labels for various applications

⚠ CAUTION

- DO NOT DISASSEMBLE
- MAY EXPLODE IF DISPOSED IN FIRE
- DO NOT EXPOSE TO DIRECT SUNLIGHT
- KEEP AWAY FROM WATER
- USE ONLY WITH RECOMMENDED CHARGER

70 mm x 45 mm

**WARRANTY
VOID**

If seal is broken

25 mm x 30 mm
Non Tearable

FRAGILE



HANDLE WITH CARE

75mm x 75 mm



20 mm Round
Non Tearable

FRAGILE

**HANDLE WITH CARE
DO NOT THROW**



FRAGILE



KEEP DRY



UPWARD



DON'T TRAMPLE

150 mm x 90 mm Tearable / Non Tearable

CAUTION



KEEP DRY



HIGH
VOLTAGE



DANGER OF
EXPLOSION



DO NOT
TAMPER



USE ONLY INV
CHARGERS



DO NOT
CRUSH/DROP



CO₂ BASED
ONLY



DO NOT OPEN

75 mm X 50 mm

CHECK SHEET (G- B-)

MODULE	
A&M SPOT WELDING	
SPOT CHECKING	
HARNES CONNECTION	
BMS MOUNTING	
SOFT PACKING	

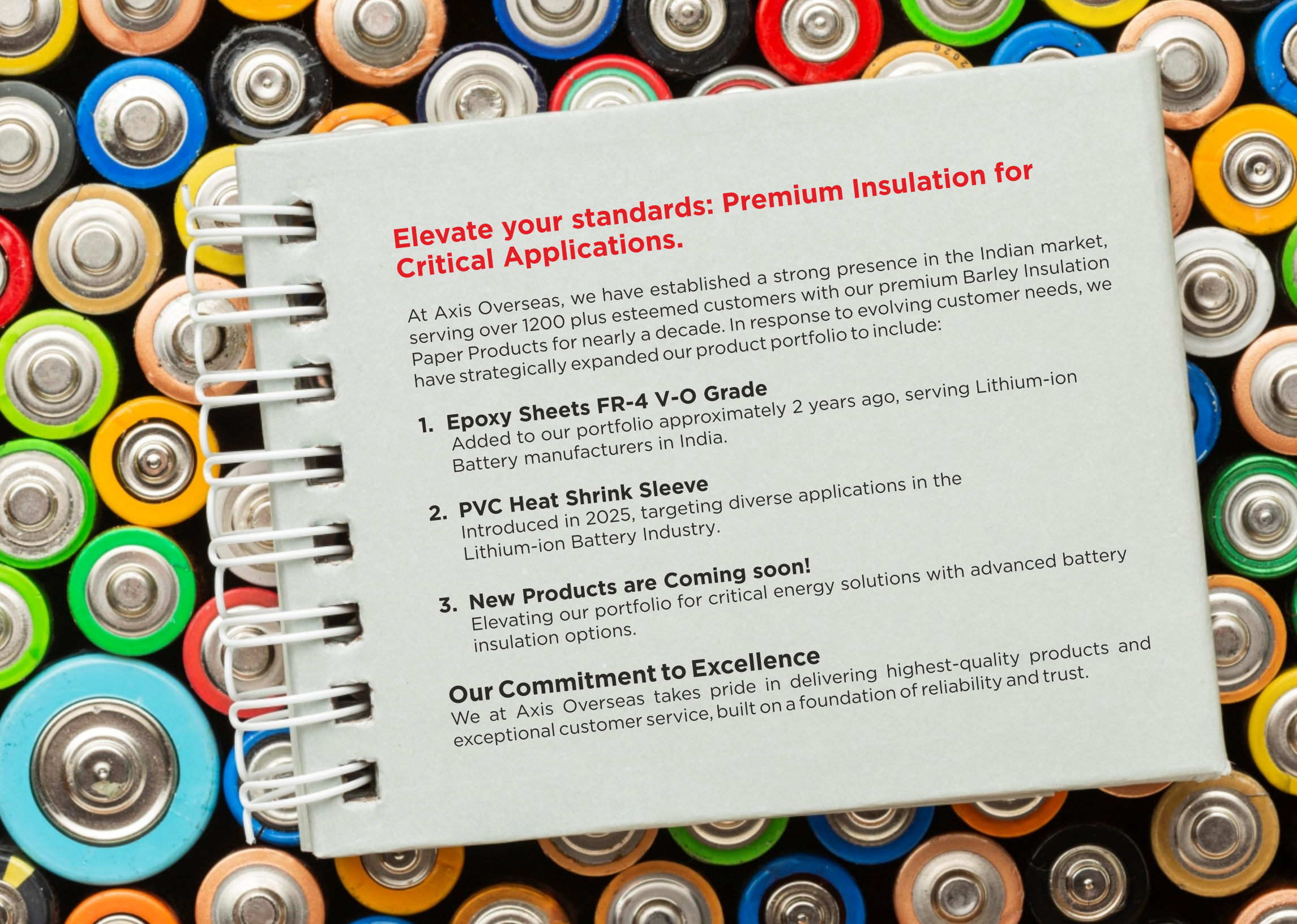
75 mm x 50 mm

**HANDLE
WITH
CARE**

40 mm Round

85 mm x 65 mm

(Customized Poly Stickers for 18650 Cells Battery Pack)



Elevate your standards: Premium Insulation for Critical Applications.

At Axis Overseas, we have established a strong presence in the Indian market, serving over 1200 plus esteemed customers with our premium Barley Insulation Paper Products for nearly a decade. In response to evolving customer needs, we have strategically expanded our product portfolio to include:

1. Epoxy Sheets FR-4 V-O Grade

Added to our portfolio approximately 2 years ago, serving Lithium-ion Battery manufacturers in India.

2. PVC Heat Shrink Sleeve

Introduced in 2025, targeting diverse applications in the Lithium-ion Battery Industry.

3. New Products are Coming soon!

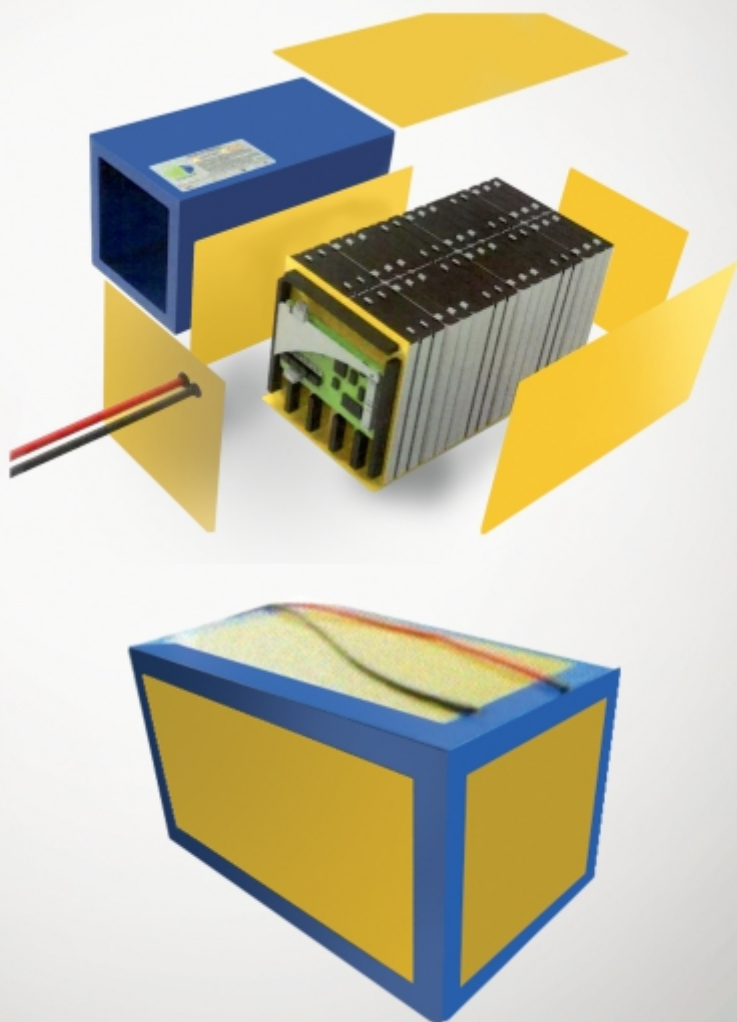
Elevating our portfolio for critical energy solutions with advanced battery insulation options.

Our Commitment to Excellence

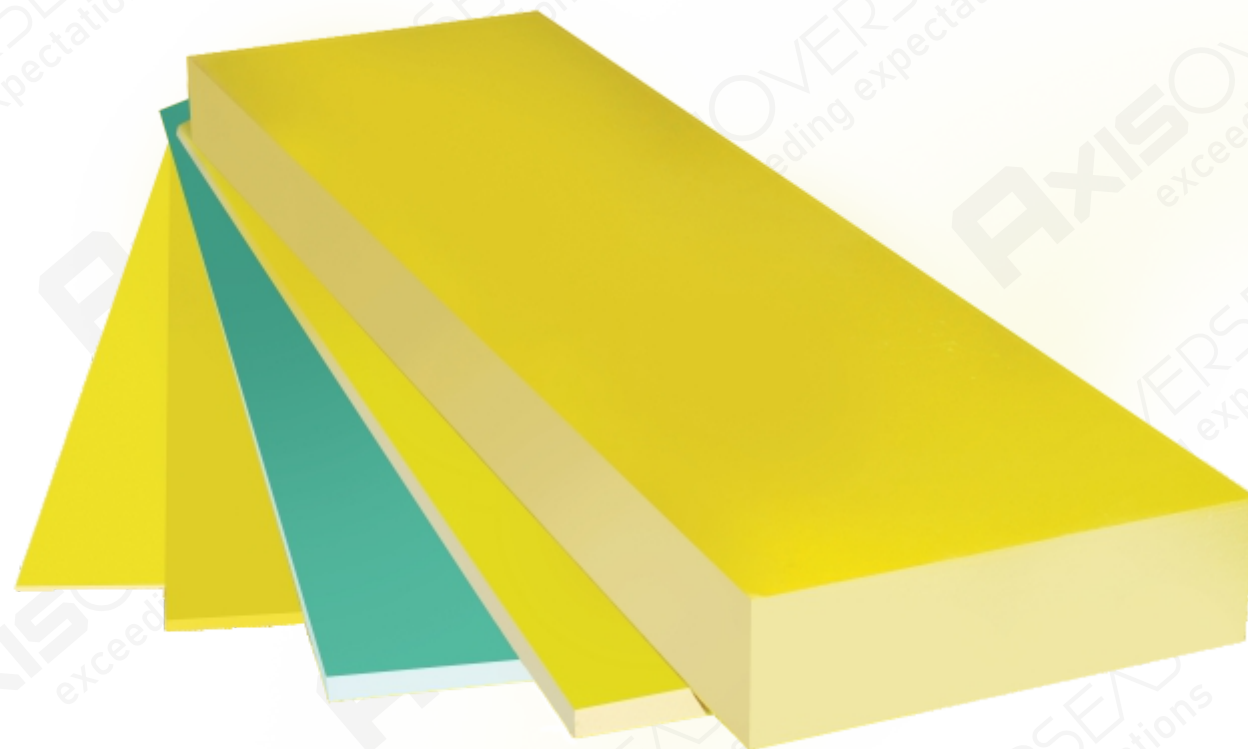
We at Axis Overseas takes pride in delivering highest-quality products and exceptional customer service, built on a foundation of reliability and trust.

Epoxy Insulation Sheets

Epoxy sheets available in various Grades and in multiple thicknesses. In Lithium-ion Battery Industry grade FR-4 V-O Grade Epoxy Sheets are most commonly used to insulate Battery packs.



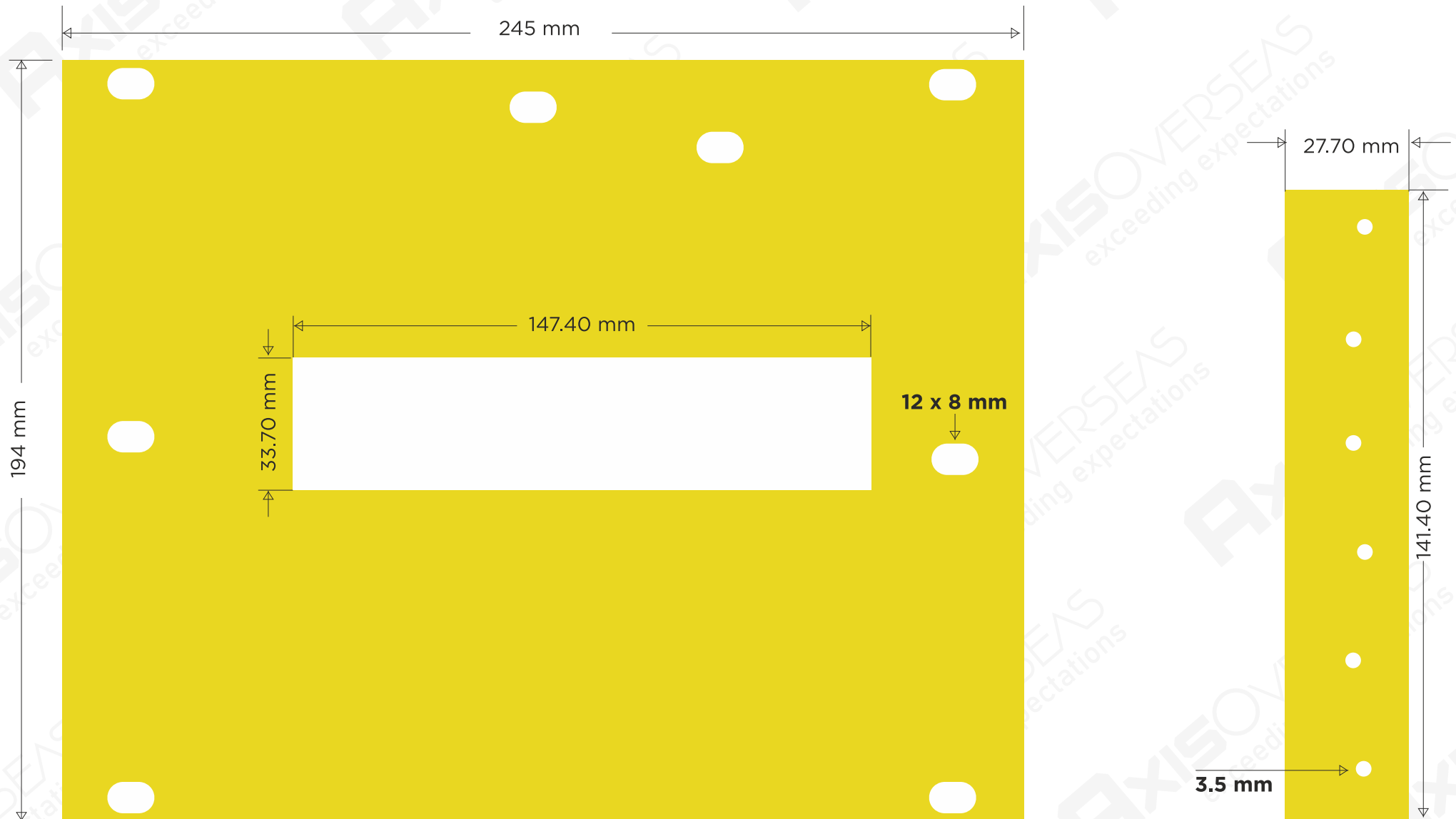
AxisOVERSEAS
exceeding expectations



**Customization
is our
USP**

We customize Epoxy Sheets as per our customer's specific Design requirements.

Precision Engineered Epoxy Sheets for Critical Applications



Technical Key Facts & Advantages of Epoxy Sheets

The process of making epoxy sheets involves layering of Epoxy Resin, reinforcing fibres, cloth, Alkali-free fibre glass impregnated with epoxy resin by hot pressing process.

In the Lithium-ion Battery Industry Epoxy Sheets are recognized by its technical name FR-4 & FR-5 where FR stands for Flame Retardant and it can withstand temperature resistance up to 130°C & 150°C respectively and are commonly used in Lithium-ion battery industry as Insulation Material.

Epoxy sheets are excellent electrical insulators with high dielectric strength and low dielectric constant. This means they can resist electrical current flow and minimize heat loss.

Epoxy resin sheets are widely used in Lithium-ion Battery Packs for various scientific thinking and applications like it acts as thermal insulators, ensures that temperature within the battery pack is kept safe at optimal parameters, fire safety, chemical resistance, high mechanical properties, ideal tensile strength, wear resistance, impact resistance and due to its robust properties, it acts as protective barrier shielding the sensitive cells from external vibration and shocks in battery packs. Epoxy sheet protects Electronic Vehicles batteries from almost all adversities.

Epoxy Sheets Technical Briefings

FR-4, FR-5, G10 and G11 all these are glass fibre reinforced epoxy resin (Glass Epoxy) insulation materials, these materials have good mechanical strength and stiffness and can be used to make structural supports, partitions, insulating gaskets and other applications and are widely used in Electronic & Electrical fields. Grades can be selected as per specific engineering needs.

Epoxy Sheets Composition Standards

FR-4 is an insulating material with a flame-retardant level of 4. It is composed of fiber glass and epoxy resin and generally meets UL94 V-0 Class standards. Used in high-temperature electronic and electrical equipment's & circuit boards. Most commonly used in Lithium-ion battery packs for insulation purposes.

Color Variation Statement:

Color Variation Advisory **FR-4 Test Report** certifies the performance and quality of our Epoxy insulation material.

Shades such as **Dark Yellow, Yellow, and Lemon Yellow** are inherent variations of the same Epoxy formulation. The final color is determined by the Prepreg batch used during manufacturing and may vary due to raw material availability. Unlike certain suppliers who use cloth and fillers to achieve uniform color.

We maintain a pure Prepreg-based composition to ensure consistent electrical and mechanical properties. While color may vary slightly across batches, all variants meet the same certified technical specifications.

Key Message for Customers:

Quality and performance remain consistent across all color variants. We recommend evaluating the material based on certified test parameters rather than color appearance.

Epoxy FR-4 V-O Grade Technical Data Sheet

Grade: FR-4

Thickness : 0.5-3.0 + 0.07 mm

NO.	Item	Unit	Test Condition	Property	Actual Value
1	Specific Gravity	g/cm ³	A	1.90-2.15	2
2	Electric Strength	KV/mm	A	≥14(3.0mm)	15
3	Breakdown Voltage	KV	A	≥60	63
4	Proof Tracking Index (PTI)	V	A	≥200	210
5	Insulation Resistance	Ω	A	≥5*10 ¹⁰	5*10 ¹²
6	Charpy Impact Strength	KJ/M ²	A	≥60	65
7	Tensile Strength	Mpa	A	≥300	310
8	Bond Strength	N	A	≥8000	8155
9	Compressive Strength	MPa	A	≥350	355
10	Flammability	Rating	UL94	UL94 V-0	V-0
11	Temperature Index	C	A	155	155
12	Toxicant Content	-	A	LOW	/
13	Acetone Resistance	Min	A	30(ok)	30
14	Surface Resistivity	MΩ	C96/35/90	Above≥1.0x10 ⁴	1.0x10 ⁶
15	Volume Resistivity	MΩ-CMC	C96/35/90	Above≥1.0x10 ⁶	1.0x10 ⁸
16	Permittivity	—	Etched/@1MHZ	≤5.4	4.58
17	Loss Tangent	—	Etched/@1MHZ	≤0.035	0.022
18	Moisture Absorption	%	D 24/23	≤0.35(min0.51) ≤0.80(max0.51)	0.21 0.23

PVC Heat Shrink Sleeves

Our PVC heat shrink sleeves are ideal for lithium-ion battery pack insulation and color coding. Available in various colours and sizes, these sleeves cater to diverse industry applications.

Shrink ratio of PVC Sleeves is 2:1 & shrink temperature is 70°C-100°C.

Additional Service

Custom-Printed & Precision-Cut
PVC Heat Shrink Tubes



PVC Heat Shrink Sleeve Technical Data Sheet

S. No.	Parameter	Specification		
1	Material Used	P.V.C. Resin : Reliance K6701 Grade, LG PVC LS100 & HANWHA P-1000		
		METHYLTIN STABILIZER : YT181A & SHITASTAB MTS 120		
		KANATOL - 800 DI - OCTYL PHTHALATE (DOP) : KLJ Polymers & Chemicals Limited		
		Epoxidized soybean OIL (620) : KLJ Polymers & Chemicals Limited		
		Calcium Stearate : PETER GREVEN CAST 325 (MALAYSIA)		
		Processing aid (K120) : LG PA 912, PA 20		
		Lubricants : FINAWAX-C (FINE ORGANIC), N.B. STEARATE (FINE ORGANIC)		
2	Size	32mm-485mm lay flat, Tolerance $\pm$ 4mm		
3	Thickness Range	110 - 170 micron, Tolerance $\pm$ 0.3 micron		
4	Procedure for Shrink	Taking sample of 100mm sleeve each size & dipping in hot boiling water, observation given below:-		
		Size 32 mm-485 mm	Width Shrinkage 40 - 45%	Length Shrinkage 10-12%
5	Shrinkage Temp	100 °C to 110 °C		
6	Chemical Resistance	Very Good		
7	Mechanical Strength	Excellent		
8	Heat Dissipation	Excellent		
9	Colour Availability	Blue, Sky Blue		
10	Standard Length	50-100 Mtrs / Roll		
11	Application	Ideal For lithium battery Packs, Electrical insulations & capacitors		

Our prestigious customers...

ARCENOL ENERGY SOLUTIONS PVT LTD (Gujarat)
ARTEK ENERGY PVT. LTD. (Noida)
ABHI SOLUTION TECHNOLOGY(Haryana)
ADIT INFRATEL PVT LTD (Gurgaon)
ADVANTEX BATTERY LLP. (Kolkata)
AVERA AI MOBILITY PVT. LTD. (Vijaywada, AP)
AVINYA BATTERIES LIMITED (Noida)
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ASCEND POWER PACKS PVT. LTD. (Hyderabad, Telangana)
ASICON ELECTRO INNOVATIONS PVT. LTD. (Jabalpur, MP)
ATC ENERGIES SYSTEM LIMITED (Palghar & Noida)
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Chat with us at 9710007966



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