



BEATLES COMPOSITES.IN



BROCHURE

Your Supplier in Composites

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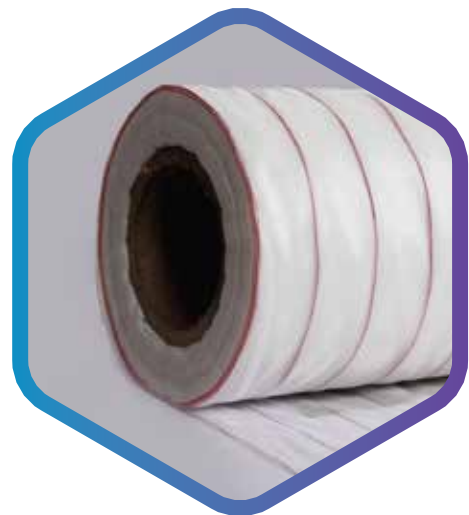
Peel ply

Peel ply is a Nylon base woven fabric used in the advanced composite industry. Peel plies are placed on the surface of the laminate where the rough surface is required. Peelply has porous and weaves structure which absorbs the excess resin during curing leaving the rough impression on the surface. It is also used to ensure dirt less, and non-contaminated surface for secondary bonding or painting.

On requirement, Peel ply can be heat set and scoured peel ply to acquire require softness and good bonding directly against laminates.

Peel ply is nylon yarn weave fabric with equispaced tracer polyester yarn for the better identification once the peel ply gets cured with the mould or laminate. This is particularly useful when working with very large composite moulds.

Will release from most commercial resin systems.



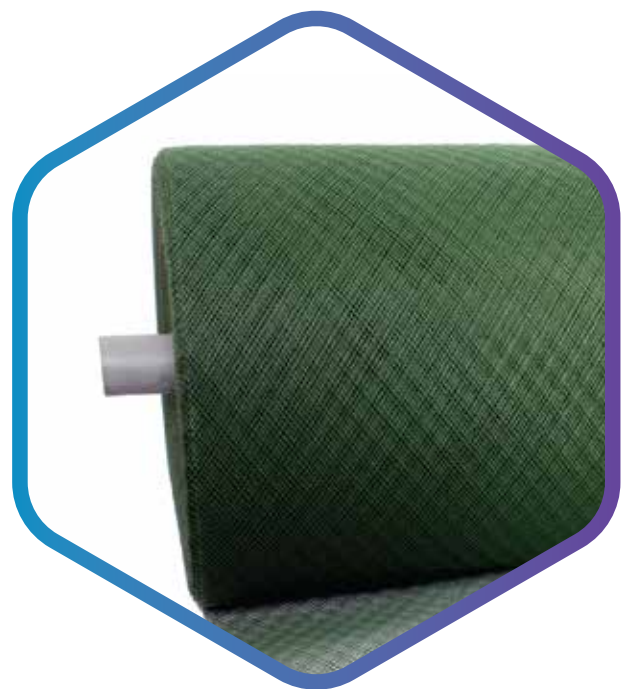
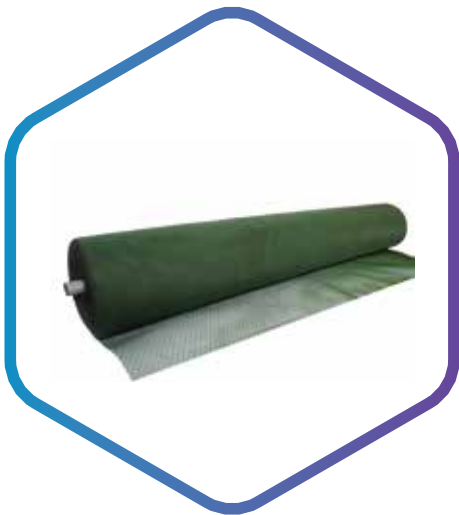
SPECIFICATIONS

Fabric Type	Nylon 6		Nylon 66
Thickness	85 GSM	105 GSM	85 GSM
Colour	Natural White		
Tracer Yarn (Identification)	Red	Blue	Green
Tracer Yarn Material	Ployester		
Usage Temperature	Upto 190° C		Upto 220° C
Meifing Temperature	240° C		260° C

Infuison Mesh

This is the polymer mesh having a diamond aperture, used in advance composite industry. It is laid flat throughout the mould surface to ensure the even flow of resin throughout the mould surface.

It is used in high vacuum and can withstand high negative pressure. It is generally used in green colour for better visual clarity of flow of the resin throughout the mould surface. After the resin is cured it is removed from the surface of the mould area.



SPECIFICATIONS

Thickness	GSM 160	GSM 250
Material	High-Density Polyethylene - HDPE	
Melting Temperature	125° C	
Thickness at Joint	0.9±0.2 mm	1.2±0.2 mm
Colour	Green	Brown

Vacuum Bagging Film

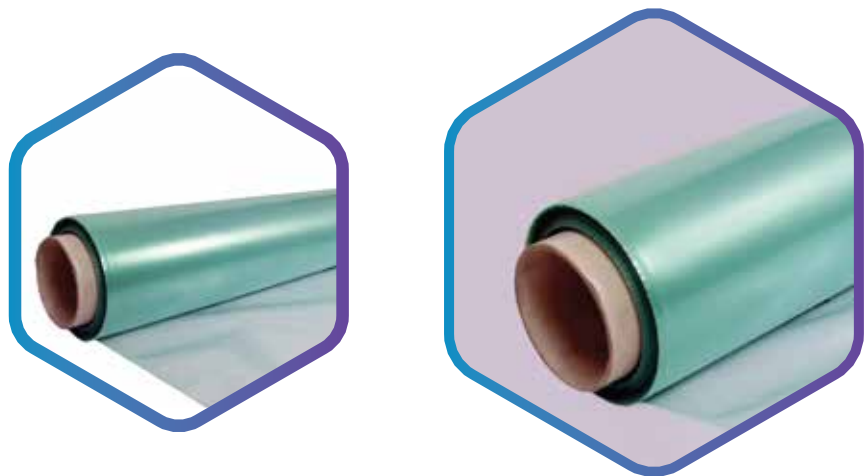
The Vacuum Bagging Film is widely used in Advanced Composites Industries. This film is used to cover and seal the mould surface under vacuum condition in the process called Vacuum Infusion. This film is widely used due to its excellent physical properties such as high-temperature resistance, toughness, good flexibility, high elongation and very low permeability.

Normally colour is green heat stabilized and the material is nylon.

It has excellent elongation and heat ageing characteristics capable of performing under high pressures and temperatures of up to 190°C for several hours.

A Caprolactam level of less than 1 % makes it an ideal choice for most vacuum bagging applications

It can be made available in different forms eg: lay flat or slit tube and sheet form.



SPECIFICATIONS

Thickness	55 Micron	65 Micron	75 Micron
Material	Nylone Polyamide		
Compatibility	Shyrene + Epoxy		
Maximum Temp.	180° C		
Colour	Green Ploy		

Breather Fabrics

Breather cloth's function is to allow air and volatiles to be removed from the vacuum bag and across the corner of the laminate or the mould. It is very much useful material in vacuum bagging and helps in maintaining the vacuum throughout the mould during the process.

Its basic material is non-woven polyester, nylon or synthetic constructions. They may also be used to absorb excess resin present in some composite layups. The various constructions are available and selection will depend on the temperature and pressures they must withstand during the curing process.



SPECIFICATIONS

Description	Property
Product Name	Breather Fabric
Material Used	Polyester
Weight (Nominal)	130(±7%)GSM
Width	120mm / 1200 mm (±10mm)
Length	100 meter (±0.5 meters)
Colour	White
Elongation At Break	Above 80%
Air Permeability (cm ³ /cm ² /sec) at 5 mm WH	190 ± 15%
Melting Temperature	250° C

Araldite.

We are having Araldite resin example Araldite LY 5052 is a low viscosity epoxy resin. When mixed with the separately sold Aradur 5052 Hardener, it creates a cold curing epoxy system for aerospace and industrial composites, tooling and aircraft repair.

List of Araldite

1. Araldite LY 5052
2. Araldite LY 556
3. Araldite AV 138M
4. Araldite AW 106



Vacuum Valves

Vacuum valves are used for vacuum application its seal enough which protects from leakage.



SPECIFICATIONS

Description	12 mm
Valve Body	Ploypropylene
Valve Knob	Ploypropylene
'O' Ring	Nitrile Rubber
Inner Diameter Connector	Minimum 9mm
Outer Diameter Connctor	13 mm (+/- 0.5 mm)
Threading Design Length	31 mm (+/- 0.5 mm)
Threading Type	Gripping Seressations
Valve Type	Cylindrical
Working Pressure	2kg/cm2 Pressure
Operation	Closing

Braided Hose Pipe

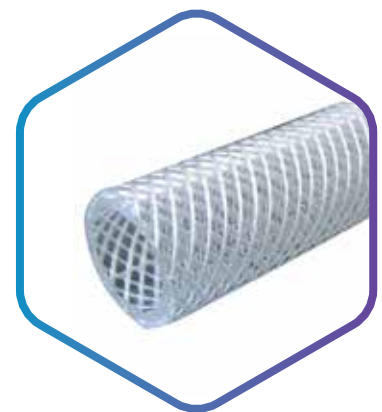
Flexible PVC transparent Braided Hose with high tenacity Polyester Yarn, is strong enough to withstand high pressure application and permits easy fluid flow.

Applications:

This hose are specially developed from non-toxic high quality PVC with multipurpose use.

It is used for resin flow line as well as vacuum suction line connections in advance composites processing.

It's mirror like transparency with smooth surface provide excellent visual flow characteristics allows easy detection of blocks and air locks & hence, this hose are widely accepted.



SPECIFICATIONS

Parameter / I.D.	12.5 mm	19 mm	25 mm	32 mm
Tolerance	12.5±0.5mm	19±0.5mm	25±0.5mm	32±0.5mm
Thickness	2.75 to 3 mm	2.70 to 3 mm	3.50 to 4 mm	3.7 to 4.2mm
Yarn	1200 Denier Twisted			
Material	Non-Toxic Food Grade			
Appearance	Transparent with glossy and smooth surface finish			
Temp. Resist.	100° C to 65° C			
Colour	Light Blue / Transparent			

Spiral Tube

Product is used during resin infusion in composites product formation. They are used to establish consistent vacuum throughout the mould evenly. This is used as it maintains vacuum throughout the mould even at the full vacuum as it is capable of withstanding negative pressure without collapsing.



SPECIFICATIONS

Parameter / I.D.	8.5 mm	10 mm	12 mm	16 mm
Tolerance	8.5±0.5mm	10.4±0.5mm	12 m (-0.1 to +0.5 mm)	16±0.5mm
Pitch	16±0.5mm	13±0.5mm	17±0.5mm	20±0.5mm
Thickness	1.4±0.1mm	1.2±0.1mm	1.2±1.3mm	1.3±0.1mm
Colour	Opaque White			

Feed Hose Pipe

Feed Hose is made of HOPE and is used in advance composites industries where in the manufacturing process is VARIM. Generally this hose is used to draw resin into a dry fibre laminate laid into a mould.



SPECIFICATIONS

Material	Polythene	
Colour	Opaque White	
Parameters/ I.D.	8 mm	12 mm
Tolerance	12±0.5mm	8±0.5mm
Thickness	1.10±0.1mm	1.10±0.1mm
Max Working Temp.	125° C	125° C

Sealant Tape

Its an self adhesive and is made from butyl compound. Its butyl-rubber based, two-sided, self-adhesive sealant tape with good elastic propert- ies.

Applications:

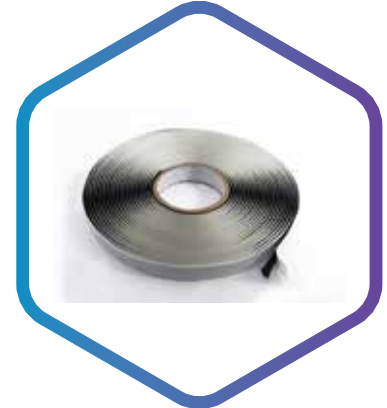
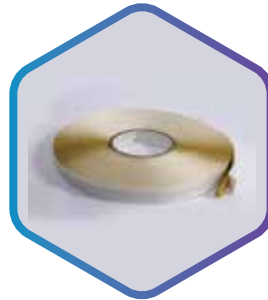
Its used in advance composite industry for the sealing and vacuum proofing purpose.

Exposed parts and underground pipe,joint and tank for anti-corrosion. All kind of parts such as water pipe,ventilation for waterproofing.

General flashing applications for dielectric insulation.

Seal and repair carport and lean to roofing joints to main wall.

Seal seams leaks in caravans,cars and trucks. Seal garages,tool sheds,outhouse and glass houses.



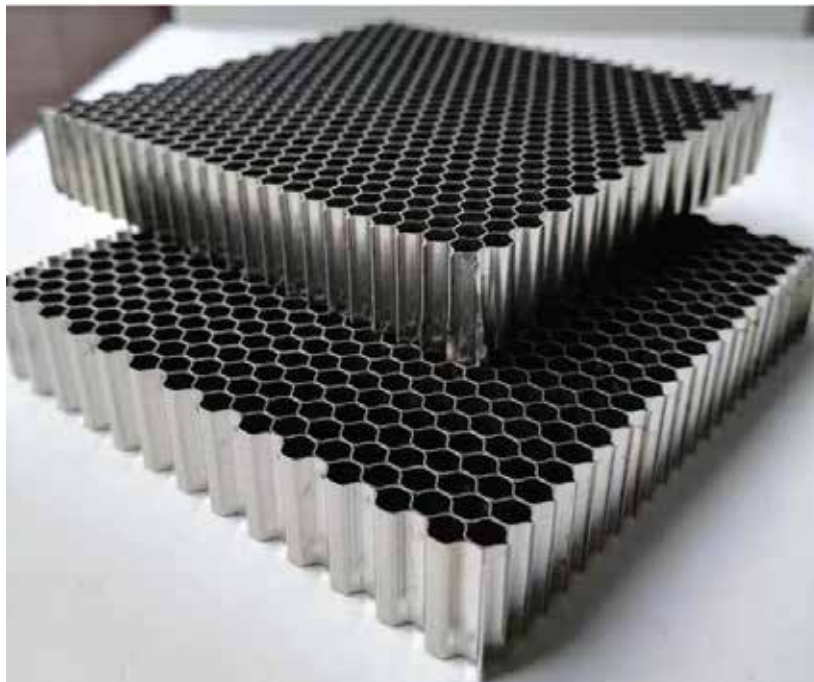
SPECIFICATIONS

Description	Properties
Appearance	Smooth and no Foaming
Peeling Strenght	≥ 0.06 Mpa
Max Use Temp.	204° C
Cone Penetration	200 C ± 2 , 100 g 55, 65 ± 5
Solid	>99%
Life Expectany	3 Years

Aluminium Honey Comb Core

Aluminium Honey comb core ,Commercial grade aluminium honeycomb is a light-weight core material which offers superior strength & corrosion resistance over 5052 & 3003 aluminum honeycomb.

Available in different size, Thickness and width.



SPECIFICATIONS

Cell Size (Inch)	1/8 to 3/8
Density	0.016 to 0.13
Sheet "Ribbon" (L) in (Inch)	48 typical to 72 max
Sheet "Transverse" (L) in (Inch)	96 typical to 200 max
Sheet "Thickness" (L) in (Inch)	20/34

Nomex Honeycomb Core

Nomex is a high-performance material known for its heat resistance, flame retardancy, and strength. When used as a honeycomb core material, Nomex provides added benefits, making it suitable for applications where fire safety and structural integrity are crucial.



SPECIFICATIONS

Material	Item Name	Density/Cell Size	Size	Thickness	Unit
1.	Nomex Honeycomb Core	29kg/m3 density 3.2mm cell Size	560x560mm	1.5 mm	Sheet
2.	Nomex Honeycomb Core	29kg/m3 density 3.2mm cell Size	560x560mm	2 mm	Sheet
3.	Nomex Honeycomb Core	29kg/m3 density 3.2mm cell Size	560x560mm	3 mm	Sheet
4.	Nomex Honeycomb Core	29kg/m3 density 3.2mm cell Size	560x560mm	4 mm	Sheet
5.	Nomex Honeycomb Core	48kg/m3 density 4.2mm cell Size	560x560mm	5 mm	Sheet
6.	Nomex Honeycomb Core	56kg/m3 density 3.2mm cell Size	560x560mm	3 mm	Sheet



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