



Vacuum Bagging Product List

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supporting the **composite industry**

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Vacuum Bagging Films

Product Code VACtiteUltraP

Product Description Supple, pink nylon vacuum bagging film (lay-flat tube)
Roll length: 75 linear metres up to 9" wide, 150 linear metres 12" to 52" wide.

General Description A strong and supple, mono-layer, heat stabilized nylon bagging film for oven and autoclave processing. Supplied as a lay-flat tubular film.



Item Ref.	Colour	Film Thickness	Nominal Yield	Tensile Strength	Elongation at Fail	Elongation at Yield	Secant Modulus	Melting point (DSC)	Deflection Temp.	Specific Gravity	Max Usage Temp.
VACtiteUltraP	Pink	0.05mm	16.53M ² /kg (for 0.05mm)	7500 N/cm ²	320%	12%	300,000 N/cm ²	215°C	205°C (at 46 N/cm ²)	1.14	205°C

Widths available	50mm (2")	75mm (3")	150mm (6")	230mm (9")	305mm (12")	455mm (18")	610mm (24")	965mm (38")	1220mm (48")	1320mm (52")
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Product Code VACtiteG

Product Description Supple, green, nylon vacuum bagging film (lay-flat tube)
Thickness available - 50µm and 75µm
Roll length - 150 linear metres

General Description A strong and supple, heat stabilized nylon bagging film for oven and autoclave processing. Supplied as a lay-flat tubular film.



Item Ref.	Colour	Film Thickness	Nominal Yield	Elongation (at Break) %	Tensile Strength (at Break) %	Max Usage Temp.
VACtiteG	Green	0.05mm	16.5M ² /kg (for 0.05mm)	MD 490% +/- 15% TD 465% +/- 15%	MD 105 N/mm ² +/-15% TD 95 N/mm ² +/-15%	200°C

Widths available	25mm (1")	50mm (2")	75mm (3")	150mm (6")	300mm (12")	600mm (24")	1000mm (40")	1500mm (60")	2000mm (80")	2300mm (90")
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Vacuum Bagging Films



Product Code VACtiteP

Product Description Pink, nylon vacuum bagging film
Roll length - 150m

General Description A strong, mono-layer, heat stabilized nylon bagging film for oven and autoclave processing. Supplied as a lay-flat tubular film.



Item Ref.	Colour	Film Thickness	Nominal Yield	Elongation (at Break) %	Tensile Strength	Max Usage Temp.
VACtiteP	Pink	0.06mm	13.7M ² /kg (for 0.06mm)	MD 490% +/- 15% TD 465% +/- 15%	MD 105 N/mm ² +/-15% TD 95 N/mm ² +/-15%	200°C

Widths available	1500mm (60")	1850mm (72")	2000mm (80")	2300mm (90")
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Product Code VACtiteO

Product Description Orange, multilayer vacuum bagging film
Available in lay-flat tube and 'V' sheet:
50 micron thickness - 1.5m (open 3m)
75 micron thickness - 1m (open 2m); 1.5m (open 3m);
2.3m (open 4.6m)

Roll lengths:
50 micron thickness - 250m (200m for 2000mm width) 75 micron thickness - 180m (150m for 4600mm width)

General Description A highly flexible multilayer nylon bagging film designed for processing of advanced composite structures and laminated security glass. Key benefit is its high elongation and flexibility. Ideal for autoclave and oven cures.



Item Ref.	Colour	Film Thickness	Density	Yield	Tensile Strength at Break	Tensile Strain at Break	Max Usage Temp.
VACtiteO	Orange	0.05mm and 0.075mm	MD 410% +/-15%	TD 420% +/-15%	MD 43 N/mm ² +/-15%	TD 40 N/mm ² +/-15%	170°C

Widths available	95mm (4")	150mm (6")	250mm (10")	300mm (12")	450mm (18")	600mm (24")	900mm (36")	1200mm (48")	1500mm (60")	2000mm (80")	2300mm (90")
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Vacuum Bagging Films

Product Code VACtiteLTG

Product Description Extra wide, green, vacuum bagging film available in Sheet width: 2m

Available in 'V' sheet widths: 2m (open 4m)

Available in gusset-folded sheet widths: 2m (open to either 6m; 8m; 12m or 16m)



General Description A wide, mono-layer, nylon blend bagging film for oven processing only. Supplied as a gusset-folded sheet film.

Item Ref.	Colour	Roll Lengths	Film Thickness	Density	Yield	Tensile Strength at Break	Tensile Strain at Break	Max Usage Temp.
VACtiteLTG	Green	70m-400m (Length reduces with width)	0.075mm	0.95g/cm ³	15.1m ² /kg @ 70 micron	38 Mpa	500%	120°C

Product Code VACtiteSRG

Product Description Self releasing, green, multilayer nylon vacuum bagging film (gusset folded)

Roll length - 200 metres

General Description Self releasing vacuum bagging film specifically designed to provide easy removal from the inside of hollow composite structures after cure.

The use of a self-releasing bag helps to avoid damage to the component. The film is ideal for use in both oven and autoclave cures up to 160°C. It is compatible with phenolic and epoxy prepregs.



Item Ref.	Colour	Film Thickness	Elongation	Tensile (Break)	Max Usage Temp.
VACtiteSRG	Green	70µ ±10% - designation	MD 445% ±10% TD 350% ±10%	MD 50 N/mm ² ±10% TD 42 N/mm ² ±10%	160°C

Widths available	86mm (3.5")	100mm (4")	125mm (5")	150mm (6")	200mm (8")	250mm (10")	300mm (12")	400mm (16")	450mm (18")
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Product Code **VACleaseR1.2**

Product Description Red, high temperature FEP release film
Roll size - 1.2m wide x 150m long

General Description Non-perforated, FEP fluoropolymer release film, providing a release from all commonly used resin systems, throughout a wide temperature band (from ambient to 230°C).

Other widths available upon request



Item Ref.	Colour	Density	Tensile Strength at Break	Elongation at Break	Melting Temp.	Softening Temp.	Temp. Service Range (Min - Max)
VACleaseR1.2	Red	2.15 g/cm ²	20 Mpa	300%	260°C	220°C	-200°C : +230°C

Film Thickness	0.012mm (12 micron)	0.020mm (20 micron)	0.025mm (25 micron)
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Yield	38.8 m ² /Kg @ 12 micron	23.2 m ² /Kg @ 20 micron	18.6 m ² /Kg @ 25 micron
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Product Code **VACleaseR1.2P3**

Product Description Red, perforated high temperature FEP release film
Roll size - 1.2m wide x 150m long

General Description Perforated, FEP fluoropolymer release film, providing a release from all commonly used resin systems, throughout a wide temperature band (from ambient to 230°C).

Other widths available upon request



Item Ref.	Colour	Density	Perforation	Tensile Strength at Break	Elongation at Break	Melting Temp.	Softening Temp.	Temp. Service Range (Min - Max)
VACleaseR1.2P3	Red	2.15 g/cm ²	P3	20 Mpa	300%	260°C	220°C	-200°C : +230°C

Film Thickness	0.020mm (20 micron)	0.025mm (25 micron)
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Yield	23.2 m ² /Kg @ 20 micron	18.6 m ² /Kg @ 25 micron
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Product Code **VACleaseB1.2**

Product Description Blue, high temperature ETFE release film
Roll size - 1.2m wide x 150m long

General Description A strong, non-perforated, ETFE fluoropolymer release film, providing a release from the most commonly used resin systems, throughout a wide temperature band (from ambient to 210°C).

Other widths available upon request



Item Ref.	Colour	Density	Tensile Strength at Break	Elongation at Break	Melting Temp.	Softening Temp.	Temp. Service Range (Min - Max)
VACleaseB1.2	Blue	1.78 g/cm ²	45 Mpa	300%	265°C	190°C	-190°C : +210°C

Film Thickness	0.015mm (15 micron)	0.020mm (20 micron)
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Yield	37.5 m ² /Kg @ 15 micron	28.1 m ² /Kg @ 20 micron
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Product Code **VAClease B1.2P3**

Product Description Blue, perforated high temperature ETFE release film
Roll size - 1.2m wide x 150m long

General Description A strong, P3 perforated, ETFE fluoropolymer release film, providing a release from the most commonly used resin systems, throughout a wide temperature band (from ambient to 210°C).

Other widths available upon request



Item Ref.	Colour	Density	Tensile Strength at Break	Perforation	Elongation at Break	Melting Temp.	Softening Temp.	Temp. Service Range (Min - Max)
VAClease B1.2P3	Blue	1.78 g/cm ²	45 Mpa	P3	300%	265°C	190°C	-190°C : +210°C

Film Thickness	0.015mm (15 micron)	0.020mm (20 micron)
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Yield	37.5 m ² /Kg @ 15 micron	28.1 m ² /Kg @ 20 micron
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Product Code VACleaseLT30Y1.5

Product Description Yellow, low temperature release film
Roll size - 1.5m wide x 250m long

General Description A highly flexible, non-perforated, polypropylene based release film.
Suitable for use with epoxy prepreg up to 150°C and may be used in resin infusion applications.



Item Ref.	Colour	Density	Film Thickness	Tensile Strength at Break	Elongation at Break	Max Usage Temp.
VACleaseLT30Y1.5	Yellow	0.89 - 0.91 g/cm ²	0.03mm (30 micron)	35 N/mm ²	500%	150°C

Product Code VACleaseLT30Y1.5P3

Product Description Yellow, perforated low temperature release film
Roll size - 1.5m wide x 250m long

General Description A highly flexible, perforated, polypropylene based release film.
Suitable for use with epoxy prepreg up to 150°C and may be used in resin infusion applications.



Item Ref.	Colour	Density	Film Thickness	Perforation	Tensile Strength at Break	Elongation at Break	Max Usage Temp.
VACleaseLT30Y1.5P3	Yellow	0.89 - 0.91 g/cm ²	0.03mm (30 micron)	P3	35 N/mm ²	500%	150°C



Product Code VACleaseLT28B1.5

Product Description Blue, low temperature release film
Roll size - 1.5m wide x 250m long

General Description Release film designed for resin infusion applications, and compatible with most epoxy, polyester and vinylester resin systems.



Item Ref.	Colour	Density	Film Thickness	Tensile Strength at Break	Elongation at Break	Max Usage Temp.
VACleaseLT28B1.5	Blue	0.97 g/cm ²	0.028mm (28 micron)	51 N/mm ²	560%	100°C

Product Code VACleaseLT28B1.5P3

Product Description Blue, perforated low temperature release film
Roll size - 1.5m wide x 250m long

General Description Perforated release film designed for resin infusion applications, and compatible with most epoxy, polyester and vinylester resin systems.



Item Ref.	Colour	Density	Film Thickness	Perforation	Tensile Strength at Break	Elongation at Break	Max Usage Temp.
VACleaseLT28B1.5P3	Blue	0.97 g/cm ²	0.028mm (28 micron)	P3	51 N/mm ²	560%	100°C



Product Code VACB4

Product Description Lightweight polyester breather fabric -150gms/sqM (4.4oz/sqYd)

General Description Needled, polyester fabric for use as a highly drapable, breather/absorption medium in composite vacuum bagging applications.



Item Ref.	Colour	Roll Length	Material Fibre	Nominal Weight	Nominal Thickness	Max. Usage Temp.
VACB4	White	100m	100% Polyester	150gms/sqM (4.40z/sqYd)	2.5mm (uncompressed)	200°C
Widths available	100mm	220mm	0.75m (30")	1.5m (60")		

Product Code VACB10

Product Description Heavyweight breather fabric - 340gms/sqM (10oz/sqYd)

General Description Needled, polyester fabric for use as a highly drapable, breather/absorption medium in composite vacuum bagging applications.



Item Ref.	Colour	Roll Length	Material Fibre	Nominal Weight	Nominal Thickness	Max. Usage Temp.
VACB10	White	50m	100% Polyester	340gms (10oz/sqYd)	4mm (uncompressed)	200°C
Widths available	50mm	70mm	100mm	120mm	0.75m (30")	1.5m (60")

Product Code VACBN10

Product Description Heavyweight, higher-airflow breather fabric - 335gms/sqM (10oz/sqYd)

General Description Needled, 80/20 nylon/polyester fabric for use as a highly drapable, breather/absorption medium in composite vacuum bagging applications.



Item Ref.	Colour	Roll Length	Material Fibre	Nominal Weight	Nominal Thickness	Max. Usage Temp.
VACBN10	White	50m	80% Nylon, 20% Polyester	335gms/sqM (10oz/sqYd)	4.2mm (uncompressed)	200°C
Widths available	0.75m (30")	1.5m (60")				



Product Code FT BS

Product Description High temperature blue polyester flash tape
- silicone adhesive

Roll length - 66m

General Description A thin, strong, silicone-adhesive coated polyester film carrier, with exceptional high quality and high performance properties. Special silicone adhesive exhibits high temperature resistance.



Item Ref.	Colour	Carrier Thickness	Adhesive Thickness	Overall Thickness	Adhesion to Steel	Tensile Strength	Elongation:	Max. Usage Temp.
FT BS	Dark Blue	0.025mm	0.038mm	0.063mm	800g / 25mm	11kg / 2.5 cm width	100%	200°C

Widths available	12.5mm	25mm	50mm
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Product Code FT YSX

Product Description High temperature yellow polyester flash tape
- silicone adhesive

Roll length - 66m

General Description A thin, strong, silicone-adhesive coated polyester film carrier, with exceptional high quality and high performance properties. Special silicone adhesive exhibits high temperature resistance.



Item Ref.	Colour	Carrier Thickness	Adhesive Thickness	Overall Thickness	Adhesion to Steel	Tensile Strength	Elongation:	Max. Usage Temp.
FT YSX	Yellow	0.025mm	0.051mm	0.076mm	900g / 25mm	11.5kg / 2.5 cm width	105%	200°C

Widths available	25mm	50mm
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Product Code FT TS

Product Description High temperature turquoise polyester flash tape - silicone adhesive.

Roll length - 66m

General Description A thin, strong, silicone-adhesive coated polyester film carrier, with exceptional high quality and high performance properties. Special silicone adhesive exhibits high temperature resistance.



Item Ref.	Colour	Carrier Thickness	Adhesive Thickness	Overall Thickness	Adhesion (Peel)	Tensile	Elongation:	Max. Usage Temp.
FT TS	Turquoise	0.025mm	0.05mm	0.075mm	6.5 N / 2.5cm width	102 N / 2.5 cm width	100%	200°C

Widths available	12.5mm	25mm	50mm
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Product Code RT PTFE

Product Description High temperature PTFE release tape - silicone adhesive

Roll length - 33m

General Description A skived and orientated PTFE film tape coated with a high temperature silicone adhesive. Provides a non-stick release surface.



Item Ref.	Colour	PTFE Carrier Thickness	Adhesive Thickness	Overall Thickness	Adhesion: ASTM - D 1000	Tensile: ASTM - D 3759	Elongation: ATSM - D 3759	Max. Usage Temp.
RT PTFE	Bronze	0.05mm & 0.125mm	0.035mm	0.085mm & 0.16mm	8.5 N / 2.5cm width	136 N / 2.5 cm width	100%	230°C

Widths available	12.5mm	25mm	50mm	75mm	100mm	150mm	230mm	305mm
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Product Code VACsealY-40

Product Description Premium grade, yellow sealant tape
Box of 40 rolls

General Description High quality pressure sensitive sealant tape offering excellent adhesion, and clean release following elevated temperature oven and autoclave cures. Reeled onto a high quality release liner for easy application.



Item Ref.	Colour	Roll Size	Density	Max. Usage Temp.
VACsealY-40	Yellow	12mm x 3mm x 7.5m	1.20 g/cc ³	205°C

Product Code VACsealG

Product Description Premium grade, grey sealant tape
Box of 24 rolls (Roll size - 12mm x 3mm x 15m)

General Description High quality pressure sensitive butyl polymer sealant tape offering excellent adhesion and clean release. Reeled onto a high quality release liner for easy application.



Item Ref.	Colour	Tensile Adhesion	Shear Adhesion	Force to Compress	Density	Max. Usage Temp. (Bag to bag)
VACsealG	Grey	400N	12 N/cm ²	0.35Kg / cm ²	1.65 g/cc ³	160°C

Product Code VACsealB

Product Description Premium grade, black sealant tape
Box of 22 rolls (Roll size - 12mm x 3mm x 15m)

General Description High quality pressure sensitive butyl polymer sealant tape offering excellent adhesion and clean release. Reeled onto a high quality release liner for easy application.



Item Ref.	Colour	Tensile Adhesion	Shear Adhesion	Force to Compress	Density	Max. Usage Temp. (Bag to bag)
VACsealB	Black	400N	12 N/cm ²	0.275Kg / cm ²	1.55 g/cc ³	150°C



Product Code **PeelplyP90**

Product Description Polyester peel-ply fabric - 90gms/sqM

General Description A high tenacity polyester yarn fabric, designed to be used with epoxy, phenolic and polyester composite systems. Leaves a rough surface impression and secondary bonding. Free of release agent and silicon.



Item Ref.	Colour	Roll Length	Tracer Yarn	Yarn Decitex	Material Weight	Max. Usage Temp.	Melting Temp.	Thickness
PeelplyP90	White with Green and Orange pin-stripe, or plain white	100m	One stripe every 20mm	280 decitex	90gms/sqM	210°C	260°C	150µ

Widths available	50mm	100mm	200mm	300mm	500mm	800mm	1.28m	1.65m
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Product Code **PeelplyN85**

Product Description Nylon peel-ply fabric - 85gms/sqM

General Description A high tenacity, nylon yarn release fabric. The fabric is scoured and heat set to remove any impurities from the weaving process. Releases from most commercial resin systems. Imparts the fabric weave pattern onto the composite component surface upon removal, where a painted finish or secondary bond is required.



Item Ref.	Colour	Roll Length	Fabric Construction	Warp Yarn	Weft Yarn	Material Weight	Max Usage Temp.
PeelplyN85	White with Red pin stripe (Also available in plain white, dyed orange & dyed green)	100m	16 x 17/cm ² plain weave construction	280 decitex nylon 6.6	280 decitex nylon 6.6	85gms/sqM	200°C

Widths available	25mm	50mm	75mm	100mm	150mm	200mm	275mm	300mm	500mm	750mm	1m	1.25m	1.5m
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Product Code **PeelplyN64**

Product Description Nylon peel-ply fabric - 64gms/sqM

General Description A high tenacity, nylon yarn release fabric. The fabric is scoured and heat set to remove any impurities from the weaving process. Releases from most commercial resin systems. Imparts a fine surface impression onto the composite component surface upon removal as preparation for painting, or as a cosmetic finish.



Item Ref.	Colour	Roll Length	Thickness	Material Weight	Max Usage Temp.
PeelplyN64	White with Red pin stripe	100m	120µ	64gms/sqM	190°C

Widths available	50mm	70mm	100mm	1m
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PTFE Coated Glass Fabrics

Product Code VACslipP1

Product Description A fine, plain weave, PTFE-coated glass fabric which imparts a fine fabric weave pattern onto the composite component surface upon removal after cure.

This fabric can also be used as a high temperature breather medium at temperatures up to 260°C, and is ideally suited to flat or single curvature components.



Item Ref.	Colour	Max Usage Temp.	Available Thickness	0.003" (0.076mm)	0.005" (0.125mm)	0.010" (0.250mm)
VACslipP1	Brown	260°C				

Product Code VACslipSA1

Product Description PTFE coated glass fabric - non porous - self adhesive

General Description A non-porous, PTFE coated, woven glass fabric with high temperature pressure sensitive silicone adhesive. Ideally suited for use as a reusable tool surface release ply.

The PTFE surface coating provides release from all types of resin system.



Item Ref.	Stocked Width	Glass Fibre Weight	Adhesive Weight	Peel Adhesion	Max. Usage Temp.
VACslipSA1	1m	150g/cm ² , 275g/cm ² , 480g/cm ²	55g/cm ²	12 N / cm width	230°C

Available Thickness	0.003" (0.076mm)	0.005" (0.125mm)	0.010" (0.250mm)

Product Code VACslipNA1

Product Description PTFE coated glass fabric - non porous - non adhesive

General Description A non-porous, PTFE coated, woven glass fabric without adhesive. Ideally suited for use as a reusable tool surface release ply / slip sheet.

The PTFE surface coating provides release from all types of resin system.



Item Ref.	Stocked Width	Glass Fibre Weight	Max. Usage Temp.
VACslipNA1	1m (Range of other widths available)	150g/cm ² , 275g/cm ² , 480g/cm ²	260°C

Available Thickness	0.003" (0.076mm)	0.005" (0.125mm)	0.010" (0.250mm)





Product Code

Chemlease® MPP 712 EZ

Product Description

Chemlease® MPP 712 EZ is formulated for sealing tooling in both the FRP and advanced composite sectors. Appropriate substrates include polyester gelcoat and non-gelcoat, epoxy and phenolic mould surfaces, and most metals. It has the ability to enhance the performance of semi-permanent release agents. In many cases, it has also been used as a means of re-surfacing a worn-out mould.



Product Code

Chemlease® 15 Sealer EZ

Product Description

Chemlease® 15 Sealer EZ is a high performance sealer developed to condition and seal mould surfaces, reduce mould porosity and act as a base for new or reconditioned moulds. It provides an excellent base coat for all types of release agents and is compatible with fiberglass, aluminium, steel, and most solid or dense surfaces.



Product Code

Chemlease® 41-90 EZ

Product Description

Chemlease® 41-90 EZ is a rapid curing semi-permanent mould release agent that provides multiple releases with minimal transfer to the moulded part.

Chemlease® 41-90 EZ is the highest slip version of the Chemlease® 41 family; primarily for closed moulding of abrasive or low draft parts, where a matte or satin finish is required.



Product Code

Chemlease® 75 EZ

Product Description

Chemlease® 75 EZ is a unique semi-permanent mould release system developed specifically for the composites industry, for use where a high quality finish is required. It performs well in releasing all commonly-known moulding resins, including, but not limited to; polyester, vinyl ester, DCPD, phenolic, epoxy and BMI.



Product Code

Chemlease® Mold Cleaner EZ

Product Description

Chemlease® Mold Cleaner EZ is a special blend of HAP free solvents designed to remove wax and contaminants from composite moulds. It is ideal for preparing composite mould surfaces for the application of mould sealers and release agents, and is also excellent for cleaning brushes and equipment.



Product Code **Silcon60**

Product Description Uncured silicone rubber intensifier material - colour Orange
Supplied as milled and pressed sheet - approx 12mm (1/2")
thick Maximum usage temperature 230°C.

General Description Uncured silicone rubber compound for use as an intensifier to
aid definition / intensification of the laminate during the cure -
especially in intricate detail areas. It is also used as an infill
within void areas of tooling, to ease bagging and reduce the
chance of bag burst.



Item Ref.	Colour	Density	Max Usage Temp.	Hardness (when cured)	Thickness
Silcon60	Orange	1.25 g/cc ³	230°C (continuous)	60 Shore A	Supplied nominally 12mm thick

Cure Parameters

Time	60 mins	45 mins	30 mins
Temp.	80°C	120°C	150°C

Curing Instruction Press into place within the tooling void or on the area of the laminate to be intensified. Ensure that the Silcon60 is separated from the laminate by release film and that additional release film is used to separate the Silcon60 from the breather fabric. Cure under vacuum in an oven or autoclave under the above time / temperature conditions. Silcon60 will cure before the resin does and therefore, will intensify the laminate during the cure stage of the resin.

General Usage Place the cured infill / intensifier in place during the lay-up stage and separate from the breather fabric using release film. Note, the life of the intensifier will be reduced if it is not separated from the curing resin by a layer of release film. Where the moulded profile of the intensifier allows, it is recommended that the intensifier is covered by a layer of PTFE release tape.

Storage Conditions The uncured material has a shelf-life of 6 months when stored at 25°C, or 24 months when stored in a freezer.



Product Code

VACconnector
+90Plug B



Product Description

VAC Innovation's two-part, through-bag vacuum connector with 50mm diameter base plate (75mm diameter also available), fitted with a 90° elbow and 1/4" BSPP brass male vacuum plug (viton seals).

This configuration is an ideal solution where vertical clearance is reduced, i.e. between layers or trays in a racked loading system.

(Available with a stainless steel plug in lieu of brass if required)

Product Code

VACconnector+Plug B



Product Description

VAC Innovation's two-part, through-bag vacuum connector with 50mm diameter base plate (75mm diameter also available) and fitted with 1/4" BSPP brass male vacuum plug (with viton seals).

The steel body (which has a male 1/4" BSPP thread on the underside) is aligned with the aluminium base and is screwed into the base whilst self-cutting through the vacuum bagging film.

(Available with a stainless steel plug in lieu of brass if required)

Product Code

VACconnector3P
+Plug B



Product Description

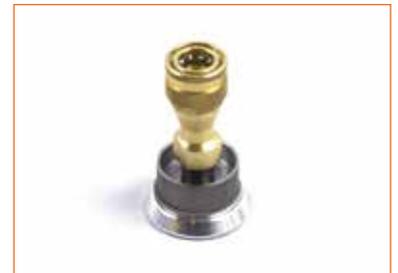
VAC Innovation's three-part, through-bag vacuum connector with 50mm diameter base plate (75mm diameter also available) and fitted with 1/4" BSPP brass male vacuum plug (with viton seals).

A hole approx 25mm (1") diameter is cut into the bagging film and the film is laid down over the unit. The sealing ring drops over the unit and onto the bagging film. The steel locking nut is screwed onto the coarse thread, tightening the sealing ring onto the bagging film.

(Available with a stainless steel plug in lieu of brass if required)

Product Code

VACconnector
+Socket B



Product Description

VAC Innovation's two-part, through-bag vacuum connector with 50mm diameter base plate (75mm diameter also available) and fitted with 1/4" BSPP brass female vacuum socket (with viton seals).

(Available with a stainless steel socket in lieu of brass if required)



Product Code VACHoseSIL

Product Description VACHoseSIL is a specially formulated, highly flexible, silicone extrusion for high temperature oven and autoclave processes up to 230°C continuous (210°C max with our connection fittings).

The hose includes a ¼" (6mm) diameter internal spring which enables it to withstand high autoclave pressures (up to 12 bar) without collapsing. The hoses are supplied with various end connection options to suit individual applications.



Product Code VACHoseHT

Product Description VACHoseHT is a flexible PTFE tube with a protective aramid fibre outer sheath, capable of operating at temperatures up to 300°C continuous (210°C max with our connection fittings).

The hose has an 8mm bore internal spring which enables it to withstand high autoclave pressures (up to 12 bar) without collapsing. The hoses are supplied with various end connection options to suit individual applications.



Product Code VACHoseLT

Product Description VACHoseLT is a flexible, cost-effective ¼" (6mm) bore vacuum hose, suitable for ambient temperature processes such as clean room vacuum bag preparation. The hoses are supplied with various end connection options to suit individual applications.



Product Code

VACconnector



Product Description

A two-part, through-bag vacuum connector with 50mm diameter base plate (75mm diameter also available).

No Plug or Socket fitted.

The steel body (which has a male 1/4" BSPP thread on the underside) is aligned with the aluminium base and is screwed into the base whilst self-cutting through the vacuum bagging film.

Product Code

VACgauge 63SC



Product Description

VACgauge63 is a portable, 63mm diameter, analogue vacuum gauge that is glycerine filled for shock resistance.

This gauge provides an immediate visual reference to the level of vacuum achieved under the vacuum bagging film, indicating whether a leak is present and the rate of loss of vacuum.

Product Code

VACPlug B



Product Description

1/4" BSPP brass vacuum connector plug with viton seal. Vacuum plugs (male) are most commonly fitted to the vacuum connectors or to manifolds, and to oven or autoclave vacuum ports.

Max Usage Temp.	Thread Size
210°C	1/4" BSPP

Product Code

VACSocket B



Product Description

1/4" BSPP brass vacuum connector socket with double 'O' rings (viton seals). Vacuum sockets (female) are most commonly fitted to the vacuum hoses.

Max Usage Temp.	Thread Size
210°C	1/4" BSPP

Product Code

Blanking Socket



Product Description

The VAC Blanking Socket has been designed to alleviate any leak paths that may occur on any unconnected sockets not in use during cure cycles in or out of autoclave / oven. The internal valves have been removed to prevent the opening of any connected valve.

Product Code

Blanking Plug



Product Description

The VAC Blanking Plug has been designed to alleviate any leak paths that may occur on any unconnected plugs not in use during cure cycles in or out of autoclave / oven. The internal valves have been removed to prevent the opening of any connected valve.



Product Code **Scissors**

Product Description Scissors for cutting carbon and aramid fabrics with a micro-serrated blade and ergonomic plastic handle.

General Description Scissors for cutting carbon and aramid fabrics. Ice-tempered, stainless steel blades for long-lasting cut and one blade micro-serrated to grip fabric. Acetone resistant and temperature resistant to 140°C.



Item Ref.	Colour	Material	Max. Temp. Capability	Cut
Scissors	Black with Orange detail	Stainless Steel / Plastic Handle	140°C	Botec-Cut - curved grinding

Available in	15cm (6")	20cm (8")	25cm (10")

Product Code **Polyurethane Cutting Surface**

Product Description Urethane sheet, "self-sealing", cutting surface, silicone-free. 80° shore A hardness.

General Description Cast, urethane sheet for use as a table top cover. Ideally suited as a base surface for cutting pre-pregs etc, as the urethane will generate no loose fibres which would otherwise contaminate the resin.



Item Ref.	Colour	Thickness	Size	Hardness
Polyurethane Cutting Surface	Wide choice of colours available	From 6mm to 20mm (6mm supplied as standard)	Any size up to Max. of: 1680mm x 3700mm	80 Shore A

Product Code **Ultrasonic Leak Detector**

Product Description This small, hand-held ultrasonic leak detector is ideally suited to the detection of leaks within the vacuum bag, the associated through-bag vacuum connectors and vacuum hoses.

The instrument detects the ultrasonic sound created by the in-rush of air through any small leak paths (generally between the bagging film and the sealant tape), and displays the intensity of the signal on an LED meter. The ultrasonic sound is also translated into an audible signal that can be heard through the head-phones supplied. By adjusting the sensitivity of the unit, the detected leak can be quickly pinpointed and sealed, thus saving considerable bagging time.



Product Code VACtakPC1

Product Description Spray adhesive compatible with polyester resin systems – clear.

General Description VACtakPC1 is a high tack, spray adhesive supplied in 500ml cans with an adjustable spray nozzle. It is primarily used during resin infusion processes to hold dry materials in place without affecting the surface finish or the resin flow.

The standard VACtakPC1 adhesive product is clear, but is also available with a green pigment which aids in identifying the surface/s that have been coated, thus allowing areas that have a greater adhesive coating to have a darker green colour.

Item Ref.	Total Solids	Dry Time	Shelf Life
VACtakPC1	28-30%	3-5 minutes dependant on temp. and humidity	18 months (from date of manufacture)

Direction for Use

Materials / surfaces to be bonded should be clean, dry and free of any dirt, dust, oil, loose paint, wax or grease and other any other contamination that may interfere with the adhesive. Make sure the working area is adequately ventilated.

The temperature of the adhesive and the materials / surfaces to be bonded should ideally be between 15°C and 40°C.

Spray a uniformly dispersed, even coating of VACtakPC1 onto both of the materials / surfaces to be bonded. Spray from a distance of 10-20cm (4"-8"), and at an angle of 90°. One surface should be sprayed vertically and the other surface horizontally. Do not over wet the surface.

Allow the adhesive to become tacky (approx 10 to 30 seconds depending on materials and environment conditions). Note, a second, localised coat may be required in critical areas such as edges and corners.

Press the two adhesive coated surfaces together with an adequate and uniform pressure (depending on the application and material weight, it may be preferable to use a roller). Repeat for subsequent material layers as necessary.

VAC Innovation recommends that a compatibility test is always carried out by spraying a small patch onto the substrates to be bonded, prior to use in production.



Product Code

PET / NYT



Product Description

PET (as pictured) is a low-cost resin inlet and vacuum tube used in the resin infusion process. PET is available in various diameters and has a maximum usage temperature of 55°C.

For infusion applications where a temperature in excess of 55°C will apply, product designation NYT should be used. NYT is available in various diameters and has a maximum usage temperature of 130°C.

Product Code

SpiralNet



Product Description

Spiral Net, like spiral wrap, is used to distribute resin in the infusion process. Spiral Net however, provides the benefit of raising the spiral wrap away from the component surface, so reducing mark-off or imprint in critical applications.

Product Code

RPVCT



Product Description

RPVCT is a resin-inlet and vacuum tube, generally used during the infusion process, when manufacturing larger structures, as it allows for a high resin flow rate. It is available in various diameters and has a maximum operating temperature of 55°C.

Product Code

SpiralWrap



Product Description

Spiral wrap is used as a resin distribution channel during the infusion process. It allows the resin to flow unrestricted to a predefined position over the surface of the component, whilst at the same time flooding out of the channel into the structural materials.

Product Code

InfMesh D227G



Product Description

InfmeshD227G is an extruded resin flow medium providing directional, high-speed resin flow, making it ideally suited to the infusion of large flat or curved structures. InfmeshD227G is compatible with both polyester and epoxy infusion resins.

Product Code

InfmeshK115B-2000



Product Description

InfmeshK115B is a highly conformable, knitted resin flow medium, which provides a steady flow rate and is ideally suited to the infusion of complex component profiles. InfmeshK115B is compatible with both polyester and epoxy infusion resins up to 90°C maximum temperature.



Product Code

Infusion Adapters



Product Description

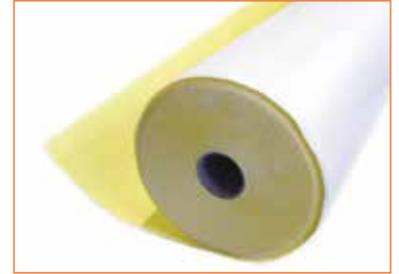
IValve10bk is a disposable, push-fit valve for use with PET tubing, which provides simple control of resin flow during the infusion process.

To accompany the IValve10bk and to aid layout of the resin infusion tubing matrix, VAC Innovation stocks various push-fit tube connectors:

- IAT10bk – 3 way connector, to create branches off the main resin line
- IAS10bk – straight connector, to join shorter lengths of tubing
- IAL10bk – 90° elbow connector, often used to direct tubing down to or from the floor, or to run parallel to the tooling when exiting the lay-up, thus avoiding large bends which would otherwise be prone to damage and potential vacuum leaks.

Product Code

Compoflex RF3



Product Description

Compoflex RF3 is a combined resin flow mesh and release fabric, used to control the flow rate and distribute the resin, whilst allowing easy removal from the composite laminate after use. As a combination product, Compoflex RF3 can offer significant lay-up time savings.

RF3 has low to medium bleed characteristics and is designed to efficiently distribute resin with limited waste, due to its low profile and light construction. It can be used with polyesters, vinylesters, epoxies and other resins.

Product Code

VACpot10



Product Description

A VAC Innovation bespoke designed and produced degassing vessel/resin catch-pot.

The VACpot 10 has been designed to be lightweight and robust. The lid and seal system enables a rapid vacuum seal, without the need for clamps, allowing for subsequent quick and simple removal of the lid.

The lid is available in either polycarbonate or aluminium, and can be extensively configured to suit customer's specific operational requirements. VACpot10 lid configuration options range from having a vacuum only connection, when used for degassing, through to multiple, quick-seal resin pipe inlets (of various sizes) when used as a resin catch-pot.

The VACpot10 will internally accommodate a 10 litre bucket.

Product Code

VAC Regulator ASSY



Product Description

For certain process applications, a reduced level of vacuum may be required. This can be achieved simply by use of a three-way valve, allowing air to be drawn through the pump. However, this will reduce the pump life expectancy.

For applications requiring a reduced level of vacuum, VAC Innovation recommends the use of a VAC Regulator. This allows the vacuum within the process to be set to the desired level, at the same time isolating the pump from the process. The pump continues to run and maintain the set level of vacuum without continuously drawing in air.

VAC Innovation can configure the VAC Regulator with various connectors to suit individual applications.



Product Description

As the vital component in any vacuum bagging process, the choice of vacuum pump is critical.

VAC Innovation supplied vacuum pumps have a proven track record of reliability, providing long lasting, low-maintenance, low running cost solution for all vacuum bagging applications.

VAC Innovation offers both oil-free and oil lubricated vacuum pumps.

Oil-free ("dry-running") pumps allow for prolonged periods of use with extremely low maintenance, and will achieve up to 85% of full vacuum (approx 26" Hg), whereas oil-lubricated pumps will achieve close to 100% of full vacuum.

B06 Oil

- Oil Sealed Vacuum Pump
- 240 volt / 13 amp Supply
- Nominal Displacement 6.4 m³ / hr at 50 Hz (7.4 m³ / hr at 60Hz)
- 3 mbar Ultimate Pressure

B20 Oil

- Oil Sealed Vacuum Pump with integral Exhaust Filter
- 240 volt / 13 amp Supply
- Nominal displacement 18 m³ / hr at 50 Hz (21 m³ / hr at 60Hz)
- 1 mbar Ultimate Pressure

B08 Dry

- Dry-running, Oil-free Vacuum Pump
- 240 volt / 13 amp Supply
- Nominal Displacement 8 m³ / hr at 50 Hz (9.5 m³ / hr at 60Hz)
- 150 mbar Ultimate Pressure

B70 Oil

- Oil Sealed Vacuum Pump with integral Exhaust Filter
- 400 volt / 3-phase Supply
- Nominal Displacement 63 m³ / hr at 50 Hz (74 m³ / hr at 60Hz)
- 3 mbar Ultimate Pressure



Autoclaves

VAC Innovation Ltd is the UK agent for Italmatic Autoclaves.

Established in 1966, ITALMATIC is now a world leader in the manufacture of autoclaves for composite production and glass laminating.

Italmatic supplies affordable autoclaves to suit any number of composite processing parameters, and offers specifications to suit all budgets; from basic touch screen control to PC+plc SCADA control.

Italmatic autoclaves can be supplied with a variety of heating options; electric, gas or diathermic oil, and are available with or without cooling as required.

ITALMATIC is an ISO 9001 Vision 2000 certified company.



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 Global Certificate
ISO-TS and ISO 9001





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