

## SECTION GUIDE

## BAGGING FILMS

Name	Description	Maximum use temperature	Elongation at break	Colour	Page
Airdraw 2	Polyamide compound	121°C	450 %	Pink	1
Big Blue L-100	Polyolefin, multi-layer	121°C	350 %	Blue	2
Securlon® V-45	Multi-layer	171°C	400 %	Translucent purple	3
Securlon® L-500Y	Nylon, multi-layer	171°C	350 %	Yellow	4
Securlon® L-1000	Nylon, multi-layer	204°C	500 %	Purple	5
Securlon® L-2000	Nylon, multi-layer	218°C	450 %	Blue	6
Stretchlon® 200	Thermoplastic elastomer	121°C	500 %	Green	7
Stretchlon® HT-350	Thermoplastic elastomer	162°C	>550 %	Grey	8
Stretchlon® 700	Thermoplastic elastomer	195°C	500 %	Cream	9
Stretchlon® 800	Nylon	204°C	450 %	Orange	10
Stretchlon® 850	Nylon	204°C	450 %	Orange	11
Ipplon® KM1300	Nylon	212°C	450 %	Pink	12
Ipplon® DP1000	Nylon	212°C	450 %	Salmon pink	13
Ipplon® DPT1000	Nylon	246°C	375 %	Orange	14
Ipplon® WN1500	Nylon	246°C	375 %	Blue	15
Econolon	Nylon	149°C	375 %	Clear	16
Wrightlon® 5400	Nylon	180°C	375 %	Clear	17
Wrightlon® 600V	Nylon	204°C	400 %	Violet	18
Wrightlon® 6400	Nylon	204°C	375 %	Yellow	19
Wrightlon® 7400	Nylon	204°C	400 %	Green	20
NBF 125C	Nylon	140°C	400 %	Clear / Violet	21
Dahlar® Release Bag 125	Polyolefin, multi-layer	140°C	400 %	Green	22
Dahlar® Release Bag 460	PMP, Nylon, multi-layer	190°C	425 %	Clear opaque	23
Dahlar® Release Bag 375	Nylon, polyolefin, multi-layer	155°C	475 %	Red	24
Dahlar® Release Bag 500	ETFE, Nylon, multi-layer	230°C	400 %	Red	25
Thermalimide	Polyimide	426°C	80 %	Amber	26
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Resin compatibility	-	-	-	-	28
Commonly Used Sizes	-	-	-	-	29

## Data Sheet

## AIRDRAW 2

### Embossed vacuum bag designed for rapid air removal

#### DESCRIPTION

AirDraw 2 vacuum bagging film is embossed with a "cracked ice" pattern which allows for rapid air removal when placed under vacuum. The film has been formulated to provide increased stiffness to assist in maintaining a breathable pattern.

AirDraw 2 is not affected by environmental conditions and will not soften in high humidity, allowing superior breathability. It is designed primarily for ply compaction with the added benefits of not requiring a breather. It is embossed from one side of the film, under close examination; the film has a flat side and a raised side. The outer surface of the roll is the raised side. For best results, place the raised side against the part surface on top of a perforated release film.

#### BENEFITS

- Embossed pattern provides network of air passageways, eliminating need for separate layer of breather.
- Improved stiffer formula keeps air path open resulting in better vacuum levels, faster.
- Wide width makes compacting large parts even faster with no seams required.

#### TECHNICAL DATA

		Test method
Material type	Polyamide compound	
Elongation at break	450 %	ASTM D 882
Tensile strength	55 MPa	ASTM D 882
Maximum use temperature	121°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Pink	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Length	Weight/Roll	Forms Available*
75 µm	1.52 m	198 m	27 kg	SHT
75 µm	3.05 m	198 m	54 kg	SHT
75 µm	3.99 m	198 m	70.6 kg	SHT

- Custom shapes and sizes are available, please contact Tygavac for more information.

\* SHT = sheeting

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a demo video of AirDraw 2 in the "Media Centre" on our website.

## Data Sheet

## BIG BLUE L-100

Inexpensive, low temperature multi-layer bagging film

### DESCRIPTION

Big Blue L-100 vacuum bag film is a multi-layer film for applications where a wide film is required. It is suitable for resin infusion and wet lay-up where the cure temperature does not exceed 121°C.

### BENEFITS

- Super wide films save time spent seaming film when bagging large parts.
- Wider films reduce risk of scrap parts due to leaky film seams.
- Inexpensive film reduces vacuum bagging costs.

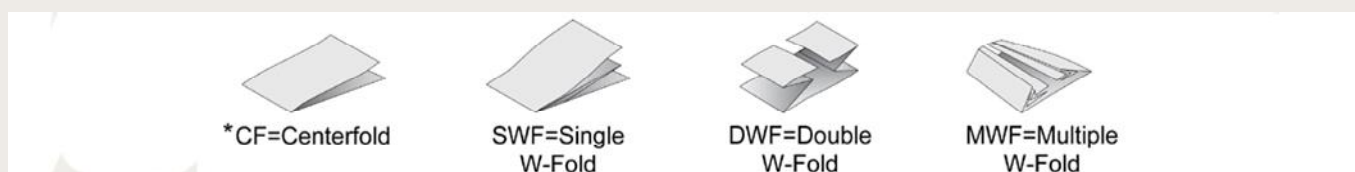
### TECHNICAL DATA

		Test method
Material type	Polyolefin, multi-layer	
Elongation at break	350 %	ASTM D 882
Tensile strength	21 MPa	ASTM D 882
Maximum use temperature	121°C	
Flammability (self extinguishing)	No	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Blue	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
75 µm	up to 16 m	varies

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.
- Maximum width of 16 m is available special order, subject to a minimum order quantity.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature, and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## SECURLON® V-45

### Economical vacuum bagging film for commercial autoclave processing

#### DESCRIPTION

Securlon® V-45 is designed for commercial applications that utilize higher temperature and higher pressure cure cycles. It is ideally suited for high performance automotive applications where autoclave processing is required and transportation interiors that commonly use phenolic prepregs.

#### BENEFITS

- Reduce scrap due to blown bags with use of this phenolic resistant bag film.
- Good elongation reduces bridging resulting in less rework due to low pressure in corners.
- Inexpensive film reduces costs compared to other high temperature films.

#### TECHNICAL DATA

		Test method
Material type	Multi-layer	
Elongation at break	400 %	ASTM D 882
Tensile strength	45 MPa	ASTM D 882
Maximum use temperature	171°C	
Flammability (self extinguishing)	No	ATP-5034
Materials to avoid	Compatible with most resin systems	
Colour	Translucent purple	
Shelf life	Unlimited when stored in original packaging at 22°C	

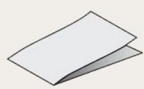
#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 4.57 m	SHT, CF, LFT
75 µm	up to 4.57 m	SHT, CF, LFT

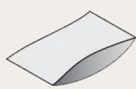
- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



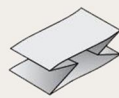
\*SHT=Sheeting



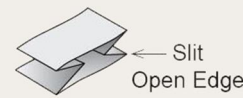
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

← Slit  
Open Edge

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## SECURLON® L-500Y

### Economical multi-layer vacuum bagging film

#### DESCRIPTION

Securlon® L-500Y vacuum bag is a wide multi-layer extruded film providing multiple layers of safety. These layers reduce the concerns for "pinholes", weak spots, brittleness and inconsistency in films. It is strong, has a high elongation and is suitable for cure temperature up to 171°C. Securlon® L-500Y is not recommended for autoclave applications.

#### BENEFITS

- Wide films save time and money spent seaming film for large parts.
- Wider films reduce risk of scrap parts due to leakage at seams.
- Reduce scrap risk due to vacuum loss with multi-layered vacuum security.

#### TECHNICAL DATA

		Test method
Material type	Nylon, multi-layer	
Elongation at break	350 %	ASTM D 882
Tensile strength	34 MPa	ASTM D 882
Maximum use temperature	171°C	
Flammability (self extinguishing)	No	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Yellow	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 8.00 m	SHT (Folded), CF, LFT, GT, G
63.5 µm	up to 8.00 m	SHT (Folded), CF, LFT, GT, G
75 µm	up to 7.62 m	SHT (Folded), CF, LFT, GT, G

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.
- Form availability varies by size.



#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## SECURLON® L-1000

### Multi-layer vacuum bagging film

#### DESCRIPTION

Securlon® L-1000 vacuum bag film is a multi-layer extruded film providing multiple layers of safety. These layers reduce the concerns for "pinholes", weak spots, brittleness and inconsistency in films. It is strong, has a high elongation capability and a temperature resistance up to 204°C. Securlon® L-1000 vacuum bag film is the most secure nylon film made for high value laminate constructions.

#### BENEFITS

- Reduce scrap risk with multi-layered vacuum security against defects.
- Super strength multi-layer construction reduces bag failure costs.
- Part quality and consistency improves with better pressure application.

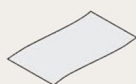
#### TECHNICAL DATA

		Test method
Material type	Nylon, multi-layer	
Elongation at break	500 %	ASTM D 882
Tensile strength	82 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Purple	
Shelf life	Unlimited when stored in original packaging at 22°C	

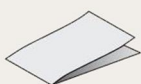
#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 7.11 m	SHT, CF, LFT

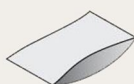
- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



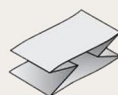
\*SHT=Sheeting



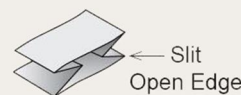
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a demo video of Securlon® L-1000 in the "Media Centre" on our website.

## Data Sheet

## SECURLON® L-2000

### Multi-layer vacuum bagging film

#### DESCRIPTION

Securlon® L-2000 vacuum bag film is a multi-layer extruded film providing multiple layers of safety. These layers reduce the concerns for "pinholes", weak spots, brittleness and inconsistency in films. It is strong, has a high elongation capability and a temperature resistance up to 218°C.

#### BENEFITS

- Reduce scrap risk with multi-layered vacuum security against defects.
- Part quality and consistency improves with better pressure application.
- Highly reliable film for high temperature cures, safeguarding expensive parts.

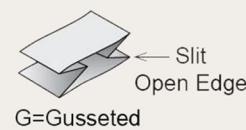
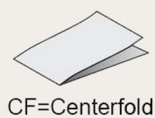
#### TECHNICAL DATA

		Test method
Material type	Nylon, multi-layer	
Elongation at break	450 %	ASTM D 882
Tensile strength	62 MPa	ASTM D 882
Maximum use temperature	218°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Strong oxidizers	
Colour	Blue	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 4.57 m	SHT, CF, LFT
75 µm	up to 4.57 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



#### NOTES

- Available embossed for compaction applications.
- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## STRETCHLON® 200

### Bagging film with high elongation

#### DESCRIPTION

Stretchlon® 200 vacuum bag film is a high elongation elastomeric film which can be used for cures up to 121°C and debulking operations. When parts with multiple contours are vacuum bagged, Stretchlon® 200 is an excellent choice as the high elongation will stretch into complex features. This film is not affected by low humidity environment. It is recommended for cures with epoxy and phenolic resins.

#### BENEFITS

- Save time bagging with less pleating, as film stretches over complex shapes.
- High elongation reduces bridging in corners and rework due to low pressure.
- Unaffected by low humidity, film is always in good condition.

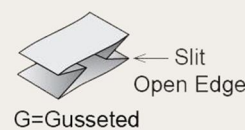
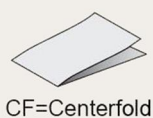
#### TECHNICAL DATA

		Test method
Material type	Thermoplastic elastomer	
Elongation at break	500 %	ASTM D 882
Tensile strength	55 MPa	ASTM D 882
Maximum use temperature	121°C	
Materials to avoid	Bismaleimide (BMI)/ Polyester and vinyl ester	
Colour	Green	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Length	Weight / Roll	Forms Available*
38 µm	1.52 m	610 m	39 kg	SHT
38 µm	3.05 m	305 m	39 kg	CF to 1.52 m

- Custom shapes and sizes are available, please contact Tygavac for more information.



#### NOTES

- Sale and use of the product covered by US Patent No. 5123985.
- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a demo video of Stretchlon® 200 in the "Media Centre" on our website.

## Data Sheet

## STRETCHLON® HT-350

High temperature, high elongation vacuum bagging film

### DESCRIPTION

Stretchlon® HT-350 is a higher temperature version of Stretchlon® 200. It can be used with all standard epoxy resin systems. The very high elongation makes this film easy to use on contour lay-ups and is an excellent choice for ply compaction. It is not recommended for autoclave processing. This film is not affected by low humidity conditions.

### BENEFITS

- Save time bagging with fewer pleats as film stretches over complex shapes.
- Avoid rework of resin rich corners by reducing bridging in corners.
- Single choice high elongation film for compaction and mid-range curing.

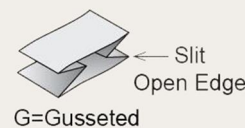
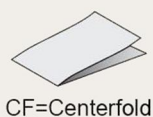
### TECHNICAL DATA

		Test method
Material type	Thermoplastic elastomer	
Elongation at break	>550 %	ASTM D 882
Tensile strength	62 MPa	ASTM D 882
Maximum use temperature	162°C	
Materials to avoid	Bismaleimide (BMI)/ Polyester and vinyl ester	
Colour	Grey	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Length	Weight / Roll	Forms Available*
75 µm	3.05 m	229 m	60.8 kg	CF to 1.52 m

- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific. When application does not require vacuum integrity for Stretchlon HT-350 it can be used for temperatures up to 187°C, Tygavac recommends testing prior to use.

## Data Sheet

## STRETCHLON® 700

Bagging film with an excellent flexibility

### DESCRIPTION

Stretchlon® 700 vacuum bag film is a high elongation elastomeric film which is designed for cures up to 195°C. It is particularly suitable for applications where softness and elongation are required. The risk of bridging in the corners is highly reduced due to the elasticity of the film. This film stays soft even in a very low humidity environment. Stretchlon® 700 is recommended for cures with phenolic and epoxy resins.

### BENEFITS

- High elongation film avoids bridging in corners and improves part quality.
- Chemically resistant film avoids blown bags with aggressive resins.
- Avoid cost of scrap and rework on complex phenolic parts.

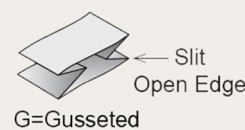
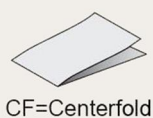
### TECHNICAL DATA

		Test method
Material type	Thermoplastic elastomer	
Elongation at break	500 %	ASTM D 882
Tensile strength	45 MPa	ASTM D 882
Maximum use temperature	195°C	
Materials to avoid	Bismaleimide (BMI) / Polyester and vinyl ester	
Colour	Cream	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Length	Weight / Roll	Forms Available*
75 µm	1.52 m	305 m	44 kg	SHT
75 µm	3.05 m	152 m	44 kg	CF to 1.52 m

- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- Sale and use of the product covered by US Patent No. 5123985.
- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a demo video of Stretchlon® 700 in the "Media Centre" on our website.

## Data Sheet

## STRETCHLON® 800

Soft, flexible nylon bagging film

### DESCRIPTION

Stretchlon® 800 vacuum bag film has the highest elongation from all nylon films and is suitable for cure temperatures up to 204°C. When parts with multiple contours are vacuum bagged, Stretchlon® 800 is a good choice offering to stretch into most areas. This film is designed to remain more flexible than standard nylon films in low humidity conditions. Stretchlon® 800 is recommended for epoxy and BMI resins.

### BENEFITS

- Soft film is unaffected by low humidity, avoiding brittle film bag damage and vacuum loss.
- High elongation film stretches into complex shapes applying full pressure, improving part quality.
- Film is easier to work with and requires no conditioning, reducing time and cost of bagging.

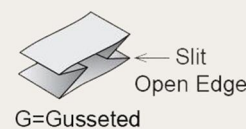
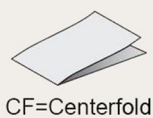
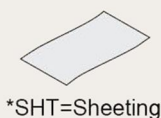
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	450 %	ASTM D 882
Tensile strength	69 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Orange	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	up to 3.56 m	SHT, CF

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## STRETCHLON® 850

Highly flexible bagging film

### DESCRIPTION

Stretchlon® 850 is a high elongation film in tube form with a good softness which will conform to complex contours. This film is designed to remain more flexible than standard nylon films in low humidity conditions. Stretchlon® 850 is recommended for epoxy and BMI resins.

### BENEFITS

- High stretch tubular film reduces time envelope bagging complex parts without bridging.
- Better part quality with film stretching to apply full pressure over complex shapes.
- Single choice film for internal bladder bagging and external envelope bagging.

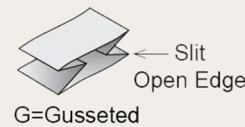
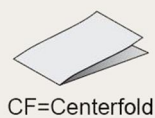
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	450 %	ASTM D 882
Tensile strength	69 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Orange	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	from 0.05 m to 4.06 m	SHT, LFT, CF
75 µm	from 0.06 m to 2.03 m	LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## IPPLON® KM1300

Soft nylon film with a high elongation

### DESCRIPTION

Ipplon® KM1300 is a vacuum bagging film with a good elongation and is suitable for cure temperatures up to 212°C. It is recommended for bagging applications where a higher softness is required. An excellent film for autoclave use or resin infusion.

### BENEFITS

- Softness and good elongation makes bagging easier and faster to complete, reducing labour cost.
- Wider film means fewer seams for safer high temperature cures of large parts in shorter cycle times.
- Good elongation reduces bridging in corners and so less rework due to resin rich corners.

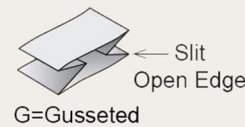
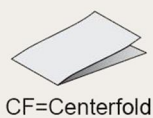
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	450 %	ASTM D 882
Tensile strength	48 MPa	ASTM D 882
Maximum use temperature	212°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Pink	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	up to 9.00 m	SHT, CF, LFT, GT, G
75 µm	up to 9.00 m	SHT, CF, LFT, GT, G

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## IPPLON® DP1000

Soft nylon film with an excellent elongation

### DESCRIPTION

Ipplon® DP1000 is a vacuum bagging film with a high elongation and is suitable for cure temperatures up to 212°C. It is recommended for bagging applications where a higher softness is required.

### BENEFITS

- Softness and high elongation makes bagging easier and faster to complete, reducing labour cost.
- Wider film means less seams for safer high temperature cures of large parts in shorter cycle times.
- High elongation reduces bridging and rework due to resin rich corners.

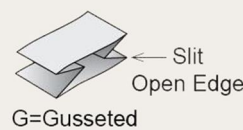
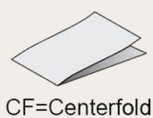
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	450 %	ASTM D 882
Tensile strength	48 MPa	ASTM D 882
Maximum use temperature	212°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Salmon pink	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	up to 9.00 m	SHT, CF, LFT
75 µm	up to 9.00 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## IPPLON® DPT1000

High temperature nylon bagging film with a good elongation

### DESCRIPTION

Ipplon® DPT1000 is a high temperature nylon film for cure temperatures up to 246°C. It can be used when high temperature and high pressure are required. It is the recommended material for cures with phenolic resins.

### BENEFITS

- Heat resistance provides vacuum security during high temperature cures.
- Good elongation helps avoid bridging in corners that can result in blown bags or resin richness.
- High strength and chemical resistance reduces bag failures with aggressive phenolic resins.

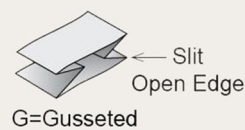
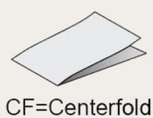
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	375 %	ASTM D 882
Tensile strength	62 MPa	ASTM D 882
Maximum use temperature	246°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Strong oxidizers	
Colour	Orange	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	up to 4.57 m	SHT, CF, LFT
75 µm	up to 4.57 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## IPPLON® WN1500

High temperature nylon bagging film with a good elongation

### DESCRIPTION

Ipplon® WN1500 is a heat-stabilized nylon film for cure temperatures up to 246°C. It can be used when high temperature and high pressure are required. Ipplon® WN1500 is the recommended material for cures with phenolic resins.

### BENEFITS

- Heat resistance provides vacuum security during high temperature cures.
- Good elongation helps avoid bridging in corners that can result in blown bags or resin richness.
- High strength and chemical resistance reduces bag failures with aggressive phenolic resins.

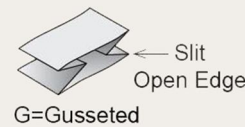
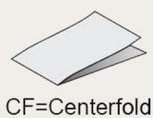
### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	375 %	ASTM D 882
Tensile strength	62 MPa	ASTM D 882
Maximum use temperature	246°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Strong oxidizers	
Colour	Blue	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
50 µm	up to 4.57 m	SHT, CF, LFT
75 µm	up to 4.57 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## ECONOLON

### Low temperature nylon vacuum bagging film

#### DESCRIPTION

Econolon is an inexpensive nylon bagging film for low temperature cures, compaction or debulking.

#### BENEFITS

- Low cost film reduces the cost of vacuum bagging.
- Can be used for compactions, debulking, and low temperature curing.
- Easy to work with, providing good vacuum levels for good quality parts.

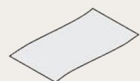
#### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	375 %	ASTM D 882
Tensile strength	48 MPa	ASTM D 882
Maximum use temperature	149°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Clear	
Shelf life	Unlimited when stored in original packaging at 22°C	

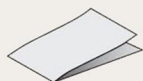
#### SIZES

Thickness	Width	Length	Weight/Roll	Forms Available*
38 µm	1.52 m	305 m	21 kg	SHT
38 µm	3.05 m	152 m	21 kg	CF to 1.52 m

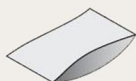
- Custom shapes and sizes are available, please contact Tygavac for more information.



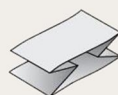
\*SHT=Sheeting



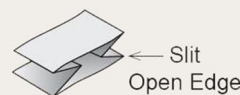
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## WRIGHTLON® 5400

### Nylon vacuum bagging film

#### ■ DESCRIPTION

Wrightlon® 5400 is a nylon bagging film with good elongation for cure temperatures up to 180°C.

#### ■ BENEFITS

- Inexpensive film with good heat resistance reduces the cost of curing.
- Wide range of available sizes means excess and film waste can be minimized.
- Easy to work with, providing good vacuum levels for good quality parts.

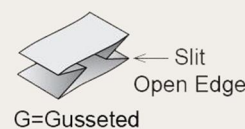
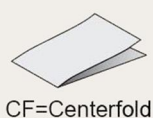
#### ■ TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	375 %	ASTM D 882
Tensile strength	48 MPa	ASTM D 882
Maximum use temperature	180°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Clear	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### ■ SIZES

Thickness	Width	Forms Available*
50 µm	up to 7.11 m	SHT, CF, LFT
75 µm	up to 7.11 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



#### ■ NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## WRIGHTLON® 600V

### Low cost nylon vacuum bagging film

#### ■ DESCRIPTION

Wrightlon® 600V vacuum bagging film is designed for low cost, commercial applications yet still performs with high pressure autoclave cure cycles. It has good elongation and stays soft in low humidity conditions.

#### ■ BENEFITS

- Inexpensive film with good performance reduces the cost of commercial autoclave moulding process.
- Good elongation and softness of film makes bagging easier and reduces cycle times.
- Combination of strength and elasticity improves part quality, reduces rework, and scrap.

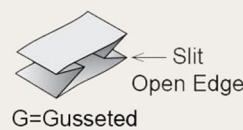
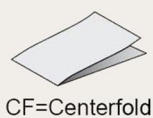
#### ■ TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	400 %	ASTM D 882
Tensile strength	65 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Violet	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### ■ SIZES

Thickness	Width	Forms Available*
50 µm	up to 7.11 m	SHT, CF, LFT
75 µm	up to 6.60 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



#### ■ NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## WRIGHTLON® 6400

### Nylon vacuum bagging film

#### DESCRIPTION

Wrightlon® 6400 is a nylon bagging film with a good elongation for cure temperatures up to 204°C.

#### BENEFITS

- Good elongation and strength reduces bridging and resin richness due to low pressure in corners.
- Wide range of available sizes means excess and film waste can be minimized.
- Good temperature resistance provides security during cure temperatures up to 204°C.

#### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	375 %	ASTM D 882
Tensile strength	55 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Yellow	
Shelf life	Unlimited when stored in original packaging at 22°C	

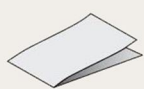
#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 7.11 m	SHT, CF, LFT
75 µm	up to 7.11 m	SHT, CF, LFT

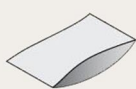
- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



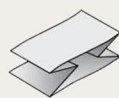
\*SHT=Sheeting



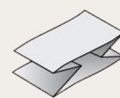
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

← Slit  
Open Edge

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## WRIGHTLON® 7400

### Nylon vacuum bagging film

#### DESCRIPTION

Wrightlon® 7400 is a high temperature nylon film with high elongation which is suitable for cure temperatures up to 204°C. It is also offered with our embossed, cracked ice pattern making it a breather, release film and vacuum bag all-in-one.

#### BENEFITS

- Proven performance with approvals on specifications worldwide for a range of applications.
- Good strength and elongation provides good pressure applications for better quality parts.
- Large range of available sizes and formats reduces waste materials and trimming time costs.

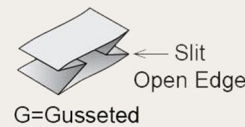
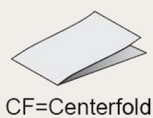
#### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	400 %	ASTM D 882
Tensile strength	55 MPa	ASTM D 882
Maximum use temperature	204°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Green	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Forms Available*
50 µm	up to 9.00 m	SHT, CF, LFT
75 µm	up to 9.00 m	SHT, CF, LFT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a video of Wide Films in the "Media Centre" on our website.

## Data Sheet

## NBF 125C

### Cast nylon vacuum bag film

#### DESCRIPTION

NBF 125C is a nylon vacuum bagging film for use in vacuum bagging applications at 140°C.

#### BENEFITS

- Ideal for use in low temperature applications.
- Can be used as an inexpensive film for debulking prepregs.
- Good elongation reduces bridging resulting in less rework due to low pressure in corners.

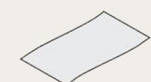
#### TECHNICAL DATA

		Test method
Material type	Nylon	
Elongation at break	400 %	ASTM D 882
Tensile strength	45 MPa	ASTM D 882
Maximum use temperature	140°C	
Flammability (self extinguishing)	Self Extinguishing	ATP-5034
Materials to avoid	Phenolic resins/Strong oxidizers	
Colour	Clear / Violet	
Shelf life	Unlimited when stored in original packaging at 22°C	

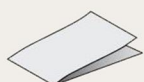
#### SIZES

Colour	Thickness	Width	Forms Available*
Clear	50 µm	up to 3.05 m	SHT
Violet	75 µm	up to 7.52 m	SHT, CF

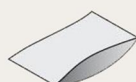
- Custom shapes and sizes are available, please contact Tygavac for more information.



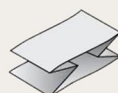
\*SHT=Sheeting



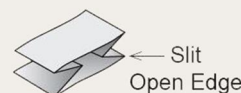
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## DAHLAR® RELEASE BAG 125

Economical vacuum bag with excellent release properties

### DESCRIPTION

Dahlar® Release Bag 125 is an economical film designed for both vacuum bagging and release applications. It can be used for cures up to 140°C and will release from most resins associated with aerospace, marine, and recreational products. This formulation has improved tear resistance and elongation over products previously offered as low temperature, multiple process films.

Dahlar® Release Bag 125 (25 µm) is the ideal release film for polyester or vinyl ester resins as well as epoxies and phenolics. See the release film section. It is also offered with our embossed, cracked ice pattern making it a breather, release film and vacuum bag all-in-one.

### BENEFITS

- Reduce inventory cost with economical single choice film option for use as bag or release film.
- Tough, strong, and good elongation make bagging much easier than with other low cost products.
- Embossed version makes compaction and debulking faster and cheaper.

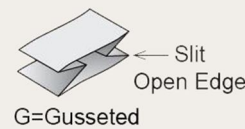
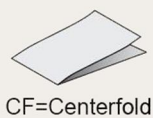
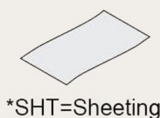
### TECHNICAL DATA

		Test method
Material type	Polyolefin, multi-layer	
Elongation at break	400 %	ASTM D 882
Tensile strength	65 MPa	ASTM D 882
Maximum use temperature	140°C	
Materials to avoid	Compatible with most resin systems	
Colour	Green	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
from 25 - 75 µm	up to 6.6 m	SHT, CF, LFT
from 50 - 75 µm	up to 4.0 m	SHT (Embossed Film)

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.
- Watch a demo video of Dahlar® Release Bag 125 in the "Media Centre" on our website.

## Data Sheet

# DAHLAR® RELEASE BAG 460

## High temperature self releasing tubular bagging film

### DESCRIPTION

Dahlar® Release Bag 460 is a self releasing multi-layer bagging film for direct contact with prepreg for fabrication of hollow parts. It exhibits superior strength, temperature resistance and vacuum integrity of multi-layer film technology. Dahlar® Release Bag 460 exhibits excellent release off epoxy resins.

This product is also available in gusseted tubing (GT). Thanks to the gusset folding, Dahlar® Release Bag 460 is easier to position accurately in hollow parts. Upon application of pressure the bag will easily expand to fit to the shape of the part which is very useful in applications where there are variations in the part diameter. This development ensures even application of internal pressure in cases of small diameter parts, where the insertion of a standard lay flat tube bagging film can be problematic.

### BENEFITS

- Multi-layer construction combines release and vacuum performance in a single material.
- Easier to position accurately in hollow section, reduces cycle time, and improves quality.
- Easier to remove after cure reducing cycle time.

### TECHNICAL DATA

		Test method
Material type	PMP, Nylon, multi-layer	
Elongation at break	425 %	ASTM D 882
Tensile strength	60 MPa	ASTM D 882
Maximum use temperature	190°C	
Materials to avoid	Polyester and vinyl ester resins	
Colour	Clear opaque	
Shelf life	Unlimited when stored in original packaging at 22°C	

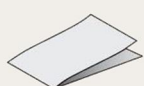
### SIZES

Thickness	Width	Forms Available*
70 µm	up to 0.305 m	LFT, GT

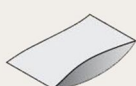
- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



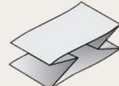
\*SHT=Sheeting



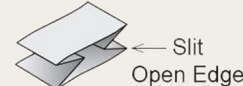
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

← Slit  
Open Edge

### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

# DAHLAR® RELEASE BAG 375

## Multi-layer self releasing tubular bagging film

### DESCRIPTION

Dahlar® Release Bag 375 is a self releasing multi-layer bagging film for direct contact with prepreg for fabrication of hollow parts such as bicycle components, fishing rods, masts, etc. It exhibits superior strength, temperature resistance and vacuum integrity of Tygavac's multi-layer film technology. Dahlar® Release Bag 375 exhibits excellent release off epoxy and polyester resins.

This product is also available in gusseted tubing (GT). Thanks to the gusset folding, the Dahlar® Release Bag 375 is easier to position accurately in hollow parts. Upon application of pressure the bag will easily expand to fit to the shape of the part which is very useful in applications where there are variations in the part diameter. This development ensures even application of internal pressure in cases of small diameter parts, where the insertion of a standard lay flat tube bagging film can be problematic.

### BENEFITS

- Multi-layer construction combines release and vacuum performance in a single material.
- Easier to position accurately in hollow sections, reduces cycle time, and improves quality.
- Easier to remove after cure reducing cycle time.

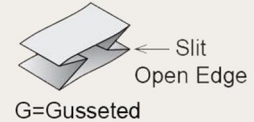
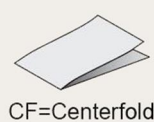
### TECHNICAL DATA

		Test method
Material type	Nylon, polyolefin, multi-layer	
Elongation at break	475 %	ASTM D 882
Tensile strength	40 MPa	ASTM D 882
Maximum use temperature	155°C	
Materials to avoid	Compatible with most resin systems	
Colour	Red	
Shelf life	Unlimited when stored in original packaging at 22°C	

### SIZES

Thickness	Width	Forms Available*
70 µm	up to 0.305 m	LFT, GT

- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

# DAHLAR® RELEASE BAG 500

## High temperature self releasing tubular bagging film

### DESCRIPTION

Dahlar® Release Bag 500 is a self releasing multi-layer bagging film for direct contact with prepreg for fabrication of hollow parts. It exhibits superior strength, temperature resistance and vacuum integrity of multi-layer film technology. This product exhibits excellent release of epoxy and polyester resins.

This product is also available in gusseted tubing (GT). Thanks to the gusset folding, Dahlar® Release Bag 500 is easier to position accurately in hollow parts. Upon application of pressure the bag will easily expand to fit to the shape of the part which is very useful in applications where there are variations in the part diameter. This development ensures even application of internal pressure in cases of small diameter parts, where the insertion of a standard lay flat tube bagging film can be problematic.

### BENEFITS

- Multi-layer construction combines release and vacuum performance in a single material.
- Easier to position accurately in hollow section, reduces cycle time, and improves quality.
- Easier to remove after cure reducing cycle time.

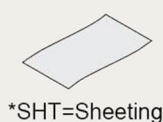
### TECHNICAL DATA

		Test method
Material type	ETFE, Nylon, multi-layer	
Elongation at break	400 %	ASTM D 882
Tensile strength	60 MPa	ASTM D 882
Maximum use temperature	230°C	
Materials to avoid	Compatible with most resin systems	
Colour	Red	
Shelf life	Unlimited when stored in original packaging at 22°C	

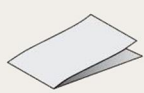
### SIZES

Thickness	Width	Forms Available*
70 µm	up to 0.203 m	LFT, GT

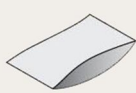
- For more sizes, see the *Commonly Used Sizes* chart in this section.
- Custom shapes and sizes are available, please contact Tygavac for more information.



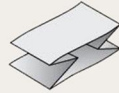
\*SHT=Sheeting



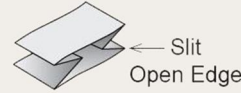
CF=Centerfold



LFT=Lay-Flat  
Tubing



GT=Gusseted  
Tubing



G=Gusseted

### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.

## Data Sheet

## THERMALIMIDE

### Ultra high temperature bagging film

#### DESCRIPTION

Thermalimide is a high performance bagging film for cure temperatures up to 426°C.

#### BENEFITS

- High temperature resistance enables vacuum bagging for extremely high temperature applications.
- Flexibility for applying pressure over simple contoured shapes.
- Superior toughness of film in comparison to metallic foils helps avoid bag tearing.

#### TECHNICAL DATA

		Test method
Material type	Polyimide	
Elongation at break	80 %	ASTM D 882
Tensile strength	240 MPa	ASTM D 882
Maximum use temperature	426°C	
Flammability (self extinguishing)	Yes	ATP-5034
Materials to avoid	None	
Colour	Amber	
Shelf life	Unlimited when stored in original packaging at 22°C	

#### SIZES

Thickness	Width	Length	Weight/Roll	Forms Available*
25 µm	1.52 m	78 m	4.3 Kg	SHT
50 µm	1.52 m	78 m	8.6 Kg	SHT
25 µm	2 m	78 m	5.65 Kg	SHT
50 µm	2 m	78 m	11.3 Kg	SHT

- Custom shapes and sizes are available, please contact Tygavac for more information.

\* SHT = sheeting

#### NOTES

- The maximum use temperature is dependent upon the duration at maximum temperature and is process specific, Tygavac recommends testing prior to use.