

DATA SHEET HK900 BAGGING FILM

HAWKEYE HK900 BAGGING FILM is a cast nylon, heat-stabilized film. This film has a melt point of 510 degrees F (265 degrees C) for increased stability in higher temperature applications where the film is exposed to elevated temperatures over prolonged time periods.

HK900 is extremely flexible for cold conformability in bagging applications and hot thermoformability in vacuum forming. The clarity of the film optimizes visibility of contained products through the film.

HK900 has good release qualities for ease of removal in curing applications. The thinner gauge provides improved cost-effectiveness and reduced waste with the loss of strength commonly associated with thinner films.

HK900 BAGGING FILM contains no caprolactan.

SPECIFICATIONS

Thickness: .00125" - .004"*

Widths: 10" – 120"" (254mm – 3048mm)
Color: Clear (colors available on request)

Elongation at Break: 365%

Tensile Strength: 12000per square inch

Maximum Use Temperature: 510°F/265°C

*other sizes available



DATA SHEET HK800 BAGGING FILM

HK800 BAGGING FILM is a modified heat stabilized blown nylon film, developed for temperatures to 350 degrees F (177 degrees C) for limited periods of time. This modified nylon film is generally softer and more flexible than standard nylon films. This film exhibits a lower elastic module while retaining its tensile strength and heat stability.

The proper use of bagging films cannot be established by thermal properties along. Consideration must be given to conditions such as: the maximum temperature of cure, pressure used, condition of autoclave and length of time exposed.

SPECIFICATIONS

Forms Available:

Thickness:

Color:

Widths:

Shelf Life:

Suggested Use Temperature:

Roll Stock and Tubing
.002" and .003" Standard
Clear or Yellow
160" Maximum without seams
1 Year (Depending on conditions)
350 degrees F (177 degrees C)



DATA SHEET HK800 CAST BAGGING FILM

HK800 CAST BAGGING FILM offers some distinctive advantages not found in blown films. Cast film does not have suspended particles found in blown film and is more resistant to pin holes. This is due to the roller process used during the casting procedure. There is no shrinkage at 350 degrees F (177 degrees C), therefore it will not pull away from the vacuum bag sealant.

SPECIFICATIONS

Forms Available:

Thickness:

Widths:

Color:

Elongation (%):

Tensile Strength (psi):

Roll Stock

.002" and .003" Standard

88" Maximum Unseamed

Clear

400 - 600

11,000 - 15,000



DATA SHEET

HK7400 BAGGING FILM

HK7400 BAGGING FILM is a high performance nylon film for advanced composite manufacturing. This film has been specially modified to provide heat stability, high elongation and a high resistance to puncture and pinholing.

HK7400 will perform well to temperatures of up to 400 degrees F (205 degrees C). The use of proper bagging films cannot be established by thermal properties along. Consideration must also be given too the maximum temperature of cure, autoclave conditions, length of time and the pressure used.

SPECIFICATIONS

Forms Available: Roll Stock, Tubing or Sheeting Thickness: .002" and .003" Standard Widths: Maximum 160" Unseamed

Color: Green or Clear

 Yield (sq. in/lb./mil):
 24,000

 Gauge Control:
 +/- 10%

 Elongation (%):
 425

Maximum Use Temperature: 410 degrees F (210 degrees C)

Heat Sealing Range 430 - 475 degrees F (221-246 degrees

C)

Melting Point: 428 degrees F (220 degrees C)

Flammability: Self Extinguishing Shrinkage at 350 degrees F: Less than 1%



DATA SHEET

HK7500 CAST BAGGING FILM

HK7500 CAST BAGGING FILM offers the same advantages as our HK800 Cast film combined with the advantages of the higher temperature range of our HK7400 blown films. HK7500 performs well to temperatures of 410 degrees F (210 degrees C).

SPECIFICATIONS

Forms Available: Roll Stock

Thickness: .002" and .003" Standard
Widths: 88" Wide Maximum Unseamed

 Color:
 Green

 Yield Strength (psi):
 4000 - 6000

 Tensile Strength (psi):
 11,000 - 15,000

Elongation (%): 400-600

Maximum Use Temperature: 410 degrees F (210 degrees C)
Minimum Recommended Use Temperature: -80 degrees F (-61 degrees C)

Flammability: Self Extinguishing

Shrinkage (% at 5 hrs at 300 degrees F):

Less than 2.0

Melting Point: 424 - 428 degrees F (218 - 220 degrees C)



DATA SHEET **HK8400 BAGGING FILM**

HK8400 BAGGING FILM is a blue tinted, heat stabilized blown film, produced from modified nylon resin. Blown film is recommended as bagging film for advanced composite fabrication and other high temperature applications where softness, workability or anti-static characteristics are essential. In addition, HK8400 has excellent heat stability and resistance to pin-holing. HK8400 can be used at temperatures up to 450 degrees F (232 degrees C) for typical composite cure cycle times.

SPECIFICATIONS

Forms Available: Roll Stock, Tubing, Seamed Wide

Thickness: .002" and .003" Standard

Width: To 120" Wide

Color: Blue

Yield Strength (psi): 9500 Gauge Control: +/- 10%

Tensile Strength (lbs/sq. in.): 14,000 Elongation (%): 300

Maximum Use Temperature: 450 degrees F (232 degrees C)

475 - 500 degrees F (246-260 degrees C) Heat Sealing Range:

Crystalline Melt Point: 500 degrees F (260 degrees C)

Flammability: Self extinguishing

Shrinkage at 350 degrees F (177 degrees C): Less than 1%



DATA SHEET

HK8500 CAST BAGGING FILM

HK8500 CAST BAGGING FILM is a blue tinted, heat-stabilized flat cast film, produced from modified nylon resin. Flat cast film is recommended as bagging film for advanced composite fabrication and other high temperature applications where dimensional stability, adherence to sealant sealant tapes and uniform film gauge are essential. In addition, HK8500 has an excellent heat stability and resistance to pinholing.

HK8500 can be used at temperatures up to 450 degrees F (232 degrees C) for typical composite cure cycle times.

SPECIFICATIONS

Forms Available: Roll Stock, Bags, Seamed Wide Widths

Thickness: .002" and .003" Standard

Width: To 120" Wide
Color: Light Blue

Color: Light Blue
Yield Strength (psi): 6500
Gauge Control: +/- 10%
Tensile Strength (lbs/sq.in): 14,000

Elongation (%): 350
Tearing Strength (gms): 90

Maximum Use Temperature: 425 degrees F (218 degrees C)

Heat Sealing Range: 430-475 degrees F (221-246 degrees C)

Flammability: Self Extinguishing
Shrinkage at 300 degrees F: Less than 1%



DATA SHEET HK1000 BAGGING FILM

HK1000 BAGGING FILM is a modified heat stabilized blown nylon film, developed for temperatures to 390 degrees F (199 degrees C) for limited periods of time. This modified nylon film is generally softer and more flexible than standard nylon films. This film exhibits a lower elastic module while retaining its tensile strength and heat stability.

The proper use of bagging films cannot be established by thermal properties along. Consideration must be given to conditions such as: the maximum temperature of cure, pressure used, condition of autoclave and length of time exposed.

SPECIFICATIONS

Forms Available:

Thickness:

Color:

Widths:

Shelf Life:

Suggested Use Temperature:

Roll Stock

.002" and .003" Standard

Clear

120" Maximum without seams

1 Year (Depending on conditions)

390 degrees F (199 degrees C)



DATA SHEET HK5900TOS BAGGING FILM

HK5900TOS BAGGING FILM is an almost universally inert film as a result of the molecular structure of the resin. HK5900TOS conforms well to compound contours. The material exhibits excellent impermeability to most corrosive liquids, vapors and gases even at elevated temperatures to 650 degrees F (340 degrees C), as well as under pressure and vacuum. HK5900TOS Bagging Film is treated one side (TOS) to provide for acceptance of Hawkeye Bag Sealants such as HK780.

HK5900TOS Bagging Film has a low deformation under load allowing higher pressures to be used. Creep under compressive stress is considerably reduced. Other advantages are a higher dielectric strength and high elongation at break.

SPECIFICATIONS

Thickness: .003" Standard Width: 48" - Standard

Temperature (Maximum Recommended): 650 degrees F (340 degrees C)

Shrinkage (1 Hour at 550 degrees F (285 degrees c): 1/2 of 1% Specific Gravity: 2.16
Tensile Strength (psi): 4,500
Elongation: 800%



DATA SHEET

HK6600 HIGH TEMPERATURE BAGGING FILM

HK6600 BAGGING FILM represents a new generation of fluorocarbon polymer bagging film specifically developed to molding applications involving complex shapes and/or high temperature resins.

HK6600 has significantly improved drapability relative to release films typically used for epoxy and other resins cured at temperatures up to 350 degrees F (176 degrees C). In addition, it proves to be the only thermally stable, yet highly conformable parting film applicable to advanced polyamides such as PMR, and to new thermoplastics. The superior performance of HK6600 is based on its outstanding properties in the most critical areas of composite molding. HK6600 has been used for 6 hours at 765 degrees F (407 degrees C).

SPECIFICATIONS

Thickness: .003"

Width: 54" - Standard

Maximum Use Temperature: 700 degrees F (371 degrees C)

Elongation (%):



DATA SHEET

HK8000 HIGH TEMPERATURE BAGGING FILM

HK8000 HIGH TEMPERATURE BAGGING FILM is a unique polyimide film used for high temperature applications. This film has ultra high heat resistance, high tensile modulus, and dimensional stability.

The HK8000F films contain a layer of fluoropolymer on one or both sides. This can then be bonded to itself or to other stable materials.

We offer this film in grades:

HK8000 An uncoated, ultra high temperature, high tensile

modulus film

HK8000SS Super stabilized version of the HK8000-S film

HK8000F Fluoropolymer Coated

We suggest using any of the above films together with HK780 Sealant Tape for a total high temperature bonding package.

SPECIFICATIONS

Thickness: .002"/.003" - Standard

(.0005"-.005" Available)

Width: 60" Maximum

Temperature (Recommended Maximum): 752 degrees F (400 degrees C)

Elongation (%): 83
Color: Amber
Yield (sq.in./lb./mil): 19,584

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DATA SHEET

HK2100 Bagging Film

HK2100 Low temperature bagging film is used primarily for debulking and compaction molding. HK2100 can be used in cycles to 120°F (49°C). The basic resin of HK2100 will meet the requirements of the Food and Drug Administration regulation 21 CFR 177.1520.

HK2100 Bagging Film can be heat-seamed to meet any custom shape requirements and releases cleanly after compaction cycles. It can be used in direct contact with the composite surface.

SPECIFICATIONS

Thickness:	.004" & .006"
Width: (Maximum)	41FT (12.5m)
Average thickness-tolerance vs. nominal	+/- 5%
Tensile Strength at Break	
MD psi	4000
TD psi	3400
Elongation at Break	
MD (%)	300
TD (%)	500
Elmendorf tear test	
MD (g)	360
TD (g)	200
Creep test (MD)	N/A
Dart Drop Impact Strength	
Flat	>450cN
Folded	>280cN



DATA SHEET HK2200R BAGGING FILM

HK2200 BAGGING FILM is a cast film for low or room temperature applications. It is produced from a modified nylon 6 resin specifically designed for debulk or compaction operations. HK2200 is an economical film used for removal of volatiles and air prior to final cure.

SPECIFICATIONS

Forms Available:

Thickness:

Width:

Elongation (%):

Tensile Strength (psi):

Use Temperature:

Roll Stock

.0015"

90" Maximum Unseamed

400 - 600

11,000 - 15,000

300 degrees F (148 degrees C)



DATA SHEET HK110 DEBULKING FILM

HK110 DEBULKING FILM is a modified polyester film designed for room temperature cures and debulking..

SPECIFICATIONS

Forms Available:	Roll Stock
Thickness:	.001"
Maximum Width:	90"
Ultimate Tensile Strength	6000 psi
Ultimate Elongation (%)	350>
Modulus at 100% Elongation	1300 psi
Tear Resistance	800 g/mil
Maximum Use Temperature	200° F



DATA SHEET PVA FILM

HAWKEYE'S POLYVINYL ALCOHOL (PVA) FILM is a general purpose and mold release material based on polyvinyl alcohol resins on controlled molecular weight. Because of its special properties, PVA film has broad application in the forming and processing of reinforced plastics, both as a mold release agent and as a blanket for uniform wall thickness. PVA film is currently being used by several major industries in many processes; blanket vacuum molding, pressure bag molding, autoclave molding, low pressure laminating, tool molding, hand lay-up molding and pre-form processing.

Vacuum and pressure bagging processes and autoclave molding using PVA film has some advantages over other types of film such as moderate tooling and unit labor costs, uniform physical properties and part uniformity. PVA film offers outstanding properties as a mold release in pressure molding, especially polyester epoxy and diallylphthalate fiberglass reinforced plastics as a separator, mold release or parting agent.

Polyvinyl Alcohol (PVA) Film is also available non-adhesive tape form, in widths as narrow as 1/2 inch.

SPECIFICATIONS

Forms Available:

Thickness:

Width:

Yield (Sq. in./lb/mil):

Tensile Strength (psi):

Elongation:

Tear (Elmendorf):

Roll Stock, Non-Adhesive Tape

.002" and .003"

54" wide - unseamed

21,600

3,000-12,000

250% - 600%

250 - 800 gm/mil



DATA SHEET HK300 BAGGING FILM

HAWKEYE'S HK300 BAGGING FILM is a general purpose and mold release material based on modified polyvinyl alcohol resins on controlled molecular weight. Because of its special properties, HK300 Bagging Film has broad application in the forming and processing of reinforced plastics, both as a mold release agent and as a blanket for uniform wall thickness. HK300 Bagging Film is currently being used by several major industries in many processes; blanket vacuum molding, pressure bag molding, autoclave molding, low pressure laminating, tool molding, hand lay-up molding and pre-form processing.

Vacuum and pressure bagging processes and autoclave molding using HK300 film has some advantages over other types of film such as moderate tooling and unit labor costs, uniform physical properties and part uniformity. HK300 film offers outstanding properties as a mold release in pressure molding, especially polyester spoxy and diallylphthalate fiberglass reinforced plastics as a separator, mold release or parting agent.

HK300 Film is also available non-adhesive tape form, in widths as narrow as 1/2 inch.

SPECIFICATIONS

Forms Available: Thickness: Width: Yield (Sq. in./lb/mil): Tensile Strength (psi): Elongation: Tear (Elmendorf): Roll Stock, Non-Adhesive Tape .002" and .003" Standard 54" wide - unseamed 21,600 3,000-12,000 250% - 600% 250 - 800 gm/mil



DATA SHEET

PVC FILM

HAWKEYE'S POLYVINYL CHLORIDE (PVC) FILM is a general purpose and mold release material based on polyvinyl chloride resins on controlled molecular weight.

SPECIFICATIONS

Thickness: .008" Standard Width: 54" Wide - Standard

Ultimate Elongation

Machine Direction: 350% Minimum Transverse Direction 300% Minimum

Tensile Strength

Machine Direction 3,000 psi Minimum
Transverse Direction 2,000 psi Minimum

Tensile Tear Resistance

Machine Direction 450% Minimum
Transverse Direction 375% Minimum
Plasticizer Volatility: 4% Maximum
Soapy Water Extraction: 2% Maximum

Soapy Water Extraction:2% MaximumLow Temperature:Minus 40 degreesDim. Stability:7% Maximum

Heat Distortion Temperature 130 - 140 degrees F (54-60 degrees C)

Yield: (lbs/sq yd./mil): .06



DATA SHEET

HK701 DE-BULK BAG FILM

HK701 Debulk film is a thin yellow film cast from a modified blend of nylon 6.6 for use as a carrier, barrier and release sheet.

The thin gauge of the HK701 provide a high yield and reduced waste for debulking. HK701 offers excellent sheet flatness, gauge uniformity and roll formation for improved machinability. HK701 offers a high styrene barrier to maintain constant styrene content and reduce styrene levels in the workplace.

HK701 is moisture sensitive. It is a hydrophilic (moisture sensitive) material. It is reconditioned at the time of manufacture and shipped in a moisture-proof wrapping film to prevent changes in moisture content prior to use. To ensure optimum stability and performance, do not unwrap HK701 until it is to be used and re-wrap it in the same film for extended storage.

SPECIFICATIONS

Gauge	.001"			
Tensile Strength (ASTM D-882 50%RH)	MD:	6600 psi	TD	5300 psi
Yield Strength (ASTM D-790 50% RH)	MD:	5300 psi	TD	5000
psi				
Tensile Modulus (ASTM D790 50% RH)	MD	100 Kpsi	TD	100 Kpsi
Elongation: (ASTM D-882-65T)	MD	260%	TD	225%
Tear Strength (Elmendorf) (ASTM D-1004)	MD	46 gm	TD	70 gm
Graves Tear (ASTM D-1992)	MD	350 g	TD	350 g



DATA SHEET HK100 BAGGING FILM

HK100 Bagging Film is a P.E.V.A. film used for room temperature cures and de-bulk processes.

SPECIFICATIONS

Thickness: .003" - .006"
Width: to 180" (457.2cm)
Elongation (%) (ASTM D882) 350
Tensile Strength (psi) (ASTM D-882) 1700
Density: (ASTM D-792) 1.13



DATA SHEET HK2660 BAGGING FILM

HK2660 BAGGING FILM is an inexpensive bagging film used in lower temperature applications. HK2660 has excellent drapability and is capable of high elongation. HK2660 is an outstanding choice when you have contoured parts using a continuous cure temperature to 250°F (122°C).

SPECIFICATIONS

Thickness: .002", .003" and .005" Width: Maximum width 120"

Color: Natural Elongation: ASTM D882 750% Tensile Modulus 2005

Melt Temperature: 285°F (141°C)

DATA SHEET

HIGH STRETCH BAGGING FILM

HIGH STRETCH BAGGING FILM is designed for use in the composite shop as a general purpose bagging film for 250 degree F (121 degree C) cure cycles. High Stretch Bagging Film is not a polyamide and overcomes problems normally associated with nylon film. High Stretch Bagging Film has a very high elongation and lower modulus than nylons. This film is designed for cures of 250-350 degrees F (121-177 degrees C) and is resistant to epoxy and phenolic resins. The film increases quality and lowers production cost by reducing lay-up time while conforming easily to all areas of the part.

SPECIFICATIONS

Thickness: .002" Standard

Specific Gravity (ASTM D792) 1.14

Widths: to 160" wide

Tensile Strength (ASTM D638)

 @100% elongation
 1000psi

 @300% elongation
 2500 psi

 Elongation (ASTM D638):
 450%

 Tear Strength:
 900 pii

Maximum Use Temperature: 350°F/177°C

Test Properties:

Die C (ASTM D624) 450 pli

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DATA SHEET

WB250 High Elongation Bagging Film

WB250 High Elongation Bagging Film has been engineered to provide softness and elongation for use in bagging, de-bulking and hot compaction cycles. WB250 High Elongation Bagging Film can be used for all standard 250°F (121°C) curing systems.

SPECIFICATIONS

Thickness: .003" (70 microns) Width: to 39FT (12 meters)

Appearance: Green

Use Temperature: 250°F (121°C)

Tensile Strength: 8,000 PSI (562 kg/cm²)

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DATA SHEET

WB356 High Elongation Bagging Film

WB356 is a modified polyolefin film with high elongation to be used as a vacuum bagging film. Currently WB356 is the widest bagging film on the market.

WB356 Bagging Film is chemically resistant to vinylester, polyester and epoxy resin systems.WB356 is an ideal bagging film for use in the wind blade, marine, and other wide-width applications.

The high elongation of the WB356 Bagging Film allows the film to conform to highly contoured parts while retaining it's vacuum bagging properties. WB356 can be recycled using suitable technologies.

WB356 is an excellent film when wider than normal parts must be bagged and cured at the 350°F range. WB356 is available in lay flat tubing up to 495" (41.25')/1257.3 cm (12.57m) wide. Roll lengths will vary by roll width.

SPECIFICATIONS

Thickness: .003"

Use Temperature: 350°F (180°C)

Width: (Maximum) 26.24' circumference lay-flat tubing

Autoignition Temperature: 752°F (400°C)
Specific Gravity: 1.01 – 1.04 g/cm³

Elongation at Break 400%

Tensile Strength >7500 PSI (527kg/cm)