

NATIONAL AEROSPACE SUPPLY CO.

33155 CAMINO CAPISTRANO • UNIT C • SAN JUAN CAPISTRANO, CA 92675
PHONE: (949) 240-6353 • FAX: (949) 248-5655

AIR FLO NA2B BONDED LIGHT WEIGHT BREATHER AND BLEEDER

DESCRIPTION

Air Flo NA2B is a synthetic fiber that is ideal as a breather and bleeder in low-pressure lay-ups. **Air Flo NA2B** has been used successfully on flat panel applications. More than one ply may be required to fit specific processing needs. It is designed to operate exceptionally in cure cycles up to 400 DEG F. **NA1000** or **NA1000P** release films should be used, as **Air Flo NA2B** is not a release material.

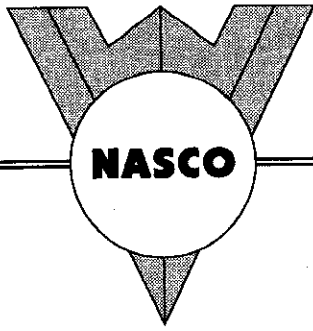
PHYSICAL PROPERTIES:

Fiber	100% Polyester
Carrier	PVA
Weight, Oz/Sqyd	2.2 oz to 2.5 oz per square yard
Thickness, inches	9 mil
Max use temp	400 DEG F

PACKAGING

Standard roll size: 56"x150 yards

Note: Information herein is believed to be correct based upon laboratory tests. No warranty of any kind is made except that materials supplied are standard quality. All risk and liability arising from handling, storage, and use of these products as well as compliance with applicable legal restrictions, rest with the buyer. Buyer's remedy is limited to return and replacement of goods found to be defective due to manufacturer.



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AIR FLO NA2R LIGHT WEIGHT BREATHER AND BLEEDER

DESCRIPTION

Air Flo NA2R is a synthetic fiber that is ideal as a breather and bleeder in low-pressure lay-ups. **Air Flo NA2R** has been used successfully on many flat pane applications. More than one ply may be required to fit specific processing needs. It is designed to operate exceptionally in cure cycles up to 400 DEG F. **NA 1000** or **NA1000P** release films should be used as **Air Flo NA2R** is not a release material.

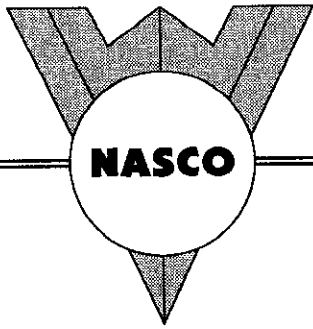
PHYSICAL PROPERTIES:

Fiber	100% Polyester
Weight, Oz/Sqyd	2.2 oz to 2.5 oz per square yard
Thickness, inches	9 mil
Max use temp	400 DEG F

PACKAGING

Standard roll size:	56"x150 yards
	54"x100 yards

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AIR FLO NA2 LIGHT WEIGHT BREATHER AND BLEEDER

DESCRIPTION

Air Flo NA 2 is a synthetic fiber that is ideal as a breather and bleeder in low-pressure lay-ups. **Air Flo NA 2** has been used successfully on many flat pane applications. More than one ply may be required to fit specific processing needs. It is designed to operate exceptionally in cure cycles up to 400 DEG F. **NA 1000** or **NA1000P** release films should be used as **Air Flo NA 2** is not a release material.

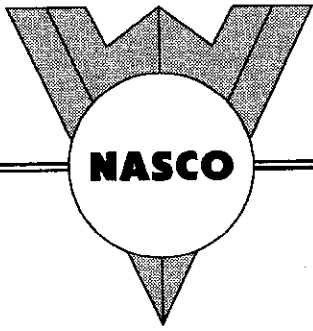
PHYSICAL PROPERTIES:

Fiber	100% Polyester
Weight, Oz/Sqyd	2.2 oz to 2.5 oz per square yard
Thickness, inches	9 mil
Max use temp	400 DEG F

PACKAGING

Standard roll size:	56"x150 yards
	54"x100 yards

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AIR FLO NA4 COMPOSITE BREATHER, RESIN BLEEDER

DESCRIPTION

Air Flo NA 4 is a 4 ounce breather material made from organic fiber that is lightweight, and stretchable. Thus, it conforms to part and assembly contours and allows maximum volatile and air flow during vacuum bag composite processing. **Air Flo NA 4** may require more than one ply to fit specific processing needs. It is designed to operate at temperatures up to 400 DEG F and 50 psi. **Air Flo NA 4** can be used as a resin bleeder for high resin content materials as well. In either breather or bleeder applications, **NA 1000** or **NA 1000 P** release films should be used as **Air Flo NA 4** is not a release material.

PHYSICAL PROPERTIES

Maximum use temperature	400 DEG F
Weight, oz/sqyd	4
Thickness, inches	1/8
Organic fiber	polyester

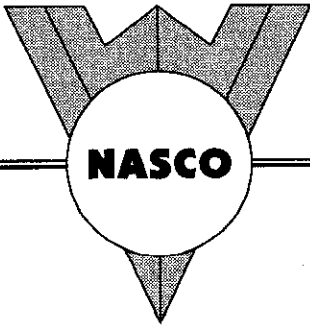
PACKAGING

Standard roll size 60"x100 yds

Wider widths are available upon request

Slitting of master rolls to any width is available upon request.

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AIR FLO NA7 COMPOSITE BREATHER, RESIN BLEEDER

DESCRIPTION

Air Flo NA 7 is a 7 ounce breather material made from organic fiber that is lightweight, and stretchable. Thus, it conforms to part and assembly contours and allows maximum volatile and air flow during vacuum bag composite processing. **Air Flo NA 7** may require more than one ply to fit specific processing needs. It is designed to operate at temperatures up to 400 DEG F and 50 psi. **Air Flo NA 7** can be used as a resin bleeder for high resin content materials as well. In either breather or bleeder applications, **NA 1000** or **NA 1000 P** release films should be used as **Air Flo NA 7** is not a release material.

PHYSICAL PROPERTIES

Maximum use temperature	400 DEG F
Weight, oz/sqyd	7
Thickness, inches	1/4
Organic fiber	polyester

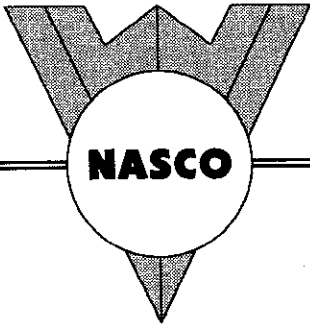
PACKAGING

Standard roll size 60"x100 yds

Wider widths are available upon request

Slitting of master rolls to any width is available upon request.

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AIR FLO NA10 COMPOSITE BREATHER, RESIN BLEEDER

DESCRIPTION

Air Flo NA 10 is a 10 ounce breather material made from organic fiber that is lightweight and stretchable. Thus, it conforms to part and assembly contours and allows maximum volatile and air flow during vacuum bag composite processing. Air flo NA 10 is thicker and heavier than Air Flo NA 4 so that multiple layers may not be necessary during lay-up. It is designed to operate at temperatures up to 400 DEG F and 100 psi. Air Flo NA 10 can be used as a resin bleeder for high resin content materials as well. In either breather or bleeder applications, NA 1000 or NA 1000 P release films should be used as Air Flo NA 10 is not a release material.

PHYSICAL PROPERTIES

Maximum use temperature	400 DEG F
Weight, oz/sqyd	10
Thickness, inches	3/8
Organic fiber	polyester

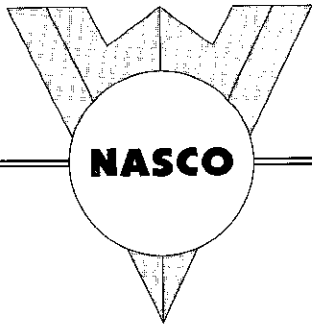
PACKAGING

Standard roll size 60 in x 50 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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AIR FLO NA20 COMPOSITE BREATHER, RESIN BLEEDER

DESCRIPTION

Air Flo NA20 is a 20-ounce breather material made from organic fiber that is lightweight and stretchable. Thus, it conforms to part and assembly contours and allows maximum volatile and airflow during vacuum bag composite processing. **Air Flo NA20** is thicker than **Air Flo NA10** so that multiple layers may not be necessary during lay-up. It is designed to operate at temperatures up to 400 DEG F and 100 psi. **Air Flo NA20** can be used as a resin bleeder for high resin content materials as well. In breather or bleeder applications, **NA 1000** or **NA 1000P** release films should be used, as **Air Flo NA20** is not a release material.

PHYSICAL PROPERTIES

Maximum use temperature	400 DEG F
Weight, oz/sqyd	20
Thickness, inches	1/2
Organic fiber	polyester

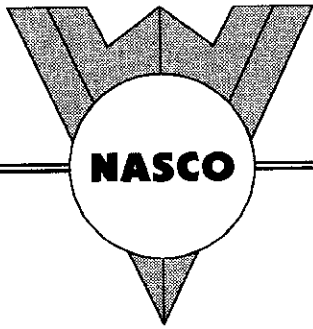
PACKAGING

Standard roll size 60 in x 25 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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AIR FLO WAFFLEWEAVE COMPOSITE BREATHER, RESIN BLEEDER

DESCRIPTION

Air Flo WAFFLEWEAVE is a lightweight, stretchable bleeder / breather material made from synthetic fibers. Thus, it conforms to part and assembly contours allowing excess resin bleed and maximum volatile and flow during vacuum bag composite processing. The **Air Flo WAFFLEWEAVE** mesh pattern provides for maximum air and volatile flow as well as clear path for drawing excess resin on prepreg and wet lay-up parts. More than one ply may be required to fit specific processing needs. It is designed to operate exceptionally in cure cycles up to 350 DEG F and 50 PSI. In either breather or resin bleeder applications, **NA 1000** or **NA 1000 P** release films should be used as **Air Flo WAFFLEWEAVE** is not a release material.

PHYSICAL PROPERTIES

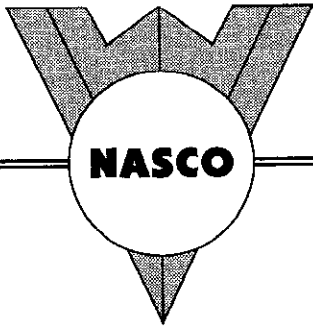
Maximum use temperature	400 DEG F
Weight, oz/sqyd	3-3.5
Thickness, inches	.016

PACKAGING

Standard roll size	64"x250 yds
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Slitting of master rolls to any width is available upon request.

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ULTRA FLO 1000 **HIGH TEMPERATURE AND PRESSURE NYLON BREATHER**

DESCRIPTION

Ultra Flo 1000 is a 13 ounce breather material made from high temperature resistant nylon fiber that is lightweight, stretchable and low-cost. It conforms to complex part and assembly shapes and outperforms polyester breathers in composites processing. Trapping off air and volatile flow during high temperature-high pressure cure cycles is a thing of the past with **Ultra Flo 1000**. The nylon fibers in non-woven mat form do not soften and compact like polyester as the softening point of nylon is 475 DEG F. Cure temperatures up to 450 DEG F and pressures exceeding 100 psi are possible without the use of fiberglass or metal chain paths for conducting volatiles away from laminates. Fewer layers of **Ultra Flo 1000** are required thus making it an economical breather choice. Reuse is possible for multiple cure cycles on net or low flow resin systems. **NA 1000** or **NA 1000P** release films should be used as **Ultra Flo 1000** is not a release material.

PHYSICAL PROPERTIES

Weight, oz/sqyd	13
Denier	30
Thickness, inches	.375
Use temperature	450 DEG F max
Softening temperature	475 DEG F

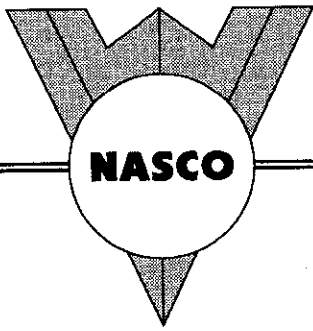
PACKAGING

Standard roll sizes: 60 in x 50 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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ULTRA FLO 2000 HIGH TEMPERATURE AND PRESSURE NYLON BREATHER

DESCRIPTION

Ultra Flo 2000 is a 13 ounce breather material made from high temperature resistant nylon fiber that is lightweight and stretchable. It conforms to complex part and assembly shapes and outperforms polyester breathers in composites processing. Trapping off air and volatile flow during high temperature-high pressure cure cycles is a thing of the past with Ultra Flo 2000. The nylon fibers in non-woven mat form do not soften and compact like polyester as the softening point of nylon is 475 DEG F. Cure temperatures up to 450 DEG F and pressures exceeding 100 psi are possible without the use of fiberglass or metal chain paths for conducting volatiles away from laminates. Fewer layers of Ultra Flo 2000 are required thus making it an economical breather choice. Reuse if possible for multiple cure cycles on net or low flow resin systems. NA 1000 or NA 1000P release films should be used as Ultra Flo 2000 is not a release material. Ultra Flo 2000 is a tighter weave construction than Ultra Flo 1000.

PHYSICAL PROPERTIES

Weight, oz/sqyd	13
Denier	32
Thickness, inches	.375
Use Temperature	450 DEG F max
Softening temperature	450 DEG F

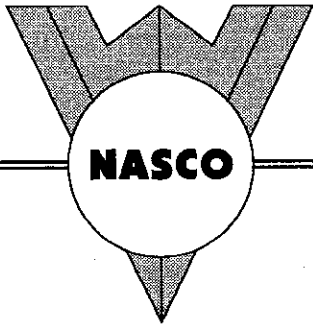
PACKAGING

Standard roll sizes: 60 in x 50 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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ULTRA FLO 3000 HIGH TEMPERATURE AND PRESSURE NYLON BREATHER

DESCRIPTION

Ultra Flo 3000 is a 10 ounce breather material made from high temperature resistant nylon fiber that is lightweight and stretchable. It conforms to complex part and assembly shapes and outperforms polyester breathers in composites processing. Trapping off air and volatile flow during high temperature-high pressure cure cycles is a thing of the past with **Ultra Flo 3000**. The nylon fibers in non-woven mat form do not soften and compact like polyester as the softening point of nylon is 475 DEG F. Cure temperatures up to 450 DEG F and pressures exceeding 100 psi are possible without the use of fiberglass or metal chain paths for conducting volatiles away from laminates. Fewer layers of **Ultra Flo 3000** is a lighter weight constriction than **Ultra Flo 1000** or **Ultra Flo 2000**.

PHYSICAL PROPERTIES

Weight, oz/sqyd	10
Denier	40
Thickness, inches	.275
Use temperature	450 DEG F max
Softening temperature	475 DEG F

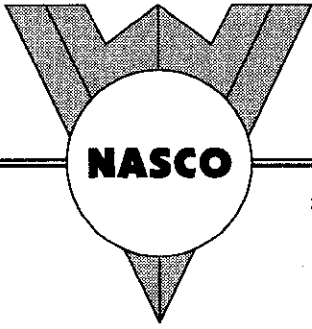
PACKAGING

Standard roll sizes: 60 in x 50 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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ULTRA FLO 4000 HIGH TEMPERATURE AND PRESSURE NYLON BREATHER

DESCRIPTION

Ultra Flo 4000 is a 4 ounce breather material made from high temperature resistant nylon fiber that is lightweight and stretchable. It conforms to complex part and assembly shapes and outperforms polyester breathers in composites processing. Trapping off air and volatile flow during high temperature-high pressure cure cycles is a thing of the past with **Ultra Flo 4000**. The nylon fibers in non-woven mat form do not soften and compact like polyester as the softening point of nylon is 475 DEG F. Cure temperatures up to 450 DEG F and pressures exceeding 100 psi are possible without the use of fiberglass or metal chain paths for conducting volatiles away from laminates. Fewer layers of **Ultra Flo 4000** is a lighter weight constriction than **Ultra Flo 1000 thru Ultra Flo 3000**.

PHYSICAL PROPERTIES

Weight, oz/sqyd	4
Denier	40
Thickness, inches	1/8
Use temperature	450 DEG F max
Softening temperature	475 DEG F

PACKAGING

Standard roll sizes: 60 in x 50 yards

Wider widths are available upon request.

Slitting of master rolls to any width is available upon request.

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