AHLSTROM

Ahlstrom SBS: High performance Sterile Barrier Systems that help you stay ahead.

Your partner in the chain of infection prevention.



Nothing stands still in healthcare. The challenges are never-ending. We should know. For more than 40 years we've worked closely with healthcare professionals to deliver ever-improving levels of protection. Our single-use medical fabrics, whether medical paper or nonwoven, consistently outperform conventional textile woven material, helping to reduce the risk of healthcare acquired infections.

Ahlstrom Reliance®

Our Reliance® range is comprised of many types of fabric, manufactured from cellulose, cellulose / synthetic or synthetic fibers. The wide range enables you to select the most appropriate Sterile Barrier System to meet the demands in your Sterile Services Department.

Our fabrics and Sterile Barrier Systems:

- Facilitate the wrapping and packaging of medical instruments and devices
- Allow the contents of packages to be completely sterilized
- Protect the contents of the package during storage and transport, and
- Promote aseptic presentation at the point of use

You can use our Sterile Barrier Fabrics to wrap your medical devices with confidence. Our fabrics are compatible with the sterilization methods used throughout the healthcare environment.



Main technologies Creped paper

For external wrapping, tray protector and overwrap



- Bacterial barrier
- Liquid repellent
- Bulky, strong
- Standard and soft versions

Manufacturing plant

We manufacture and convert our crepe paper nonwoven wrapping materials (roll goods and sheeted formats) at:

> Ahlstrom Specialties Sa Pont Audemer France

Intended Use

This Sterile Barrier System is for wrapping medical devices (outer wrap) which can be terminally sterilized by the following methods: steam (121-134°C), ethylene oxide gas and low temperature formaldehyde and irradiation. We recommend that the end user validates the final packaging system as suitable with the intended sterilization process to comply with national and international regulations.

Ahlstrom Reliance® Creped paper range

Wrap:

Ahlstrom Reliance® 310 – 60 gsm Colors available:

Ahlstrom Reliance® 310S – 60 gsm Colors available:

Tray Liner:

Ahlstrom Reliance® 309

– 80, 110 gsm Colors available:

Tray Protector:

Ahlstrom Reliance® 309S - 140 gsm

Colors available:

Overwrap:

Ahlstrom Reliance® 307 Sensitive – 43, 50 gsm Colors available:



Key technologies Wetlaid nonwovens

For internal and external wrapping and tray liners



- Excellent Bacterial barrier
- Soft and strong
- Fluid repellent including low surface tension liquids
- Low Lint

Manufacturing plant

We manufacture our wetlaid nonwoven wrapping materials (roll goods format) at:

> Ahlstrom Nonwovens LLC Windsor Locks, CT USA

We convert the material into the protective packaging system (sheeted format) at:

> Ahlstrom Specialties Sa Pont Audemer France

Intended Use

This Sterile Barrier System is for wrapping medical devices (inner and outer wrap) which can be terminally sterilized by the following methods: steam (121-134°C), ethylene oxide gas, low temperature formaldehyde and irradiation. We recommend that the end user validates the final packaging system as suitable with the intended sterilization process to comply with national and international regulations.

Ahlstrom Reliance® Wetlaid range

Wrap:

Ahlstrom Reliance® 335 – 52 gsm Colors available:

Ahlstrom Reliance® 345 – 57 gsm Colors available:

Ahlstrom Reliance® 360 – 67 gsm Colors available:

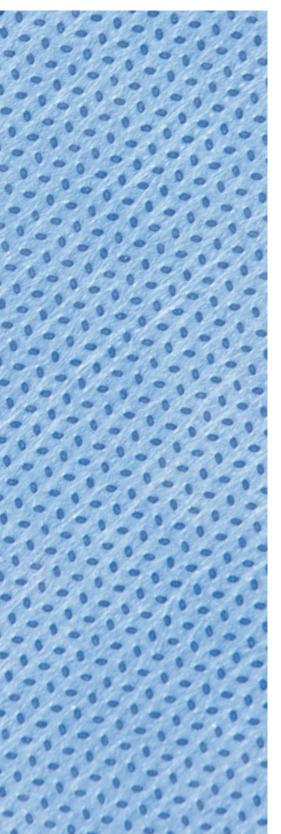
Tray Liner:

Ahlstrom Reliance® 308 – 72 gsm Colors available:

Key technologies

SMS (Spunbond Meltblown Spunbond)

For the most demanding uses – inner and/or outer wraps



- SMMMS
- Most advanced technology
- High strength
- Fluid repellency
- Soft
- Drapeability

Manufacturing plant

We manufacture the SMMMS nonwoven wrapping material (roll goods format) at:

> Ahlstrom Fibercomposites Mundra, Gujarat India

We convert the material into the protective packaging system (sheeted format) at:

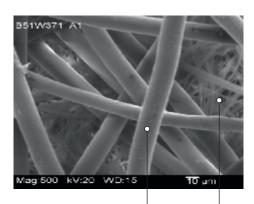
> Ahlstrom Specialties Sa Pont Audemer France

Intended Use

This Sterile Barrier System is for packaging medical devices which can be terminally sterilized by the following methods: steam (121-134°C), ethylene oxide gas, low temperature formaldehyde sterilization and peroxide gas plasma. We recommend that the end user validates the final packaging system as suitable with the intended sterilisation process to comply with national and international regulations. Meltblown used in SMS is the same as the meltblown used in a surgical facemask and is an excellent filter

General Features

- Newest and most advanced manufacturing equipment
- The key to the barrier protection of the SMMMS is the three "M" layers: three meltblown layers of microscopic fibres, delivering a tortuous path of high barrier. The tortuous path produces a uniform and consistent bacteriological and fluid barrier to maintain sterility.
- The "M" layers are sandwiched between two "S" layers – spunbond fibers, which, being larger and stronger, provide exceptional strength as well as tear-, burstand abrasion-resistance.



Spunbond fibres ~15 microns in diameter

Meltblown fibres ~2 microns in diameter

Ahlstrom Reliance® SMS range

Ahlstrom Reliance[®] SMMMS is 100% polypropylene, antistatic treated to resist static charge build-up. It does not contain natural fibers (cellulose) or synthetic binder. We produce it in three different types to satisfy different user requirements:

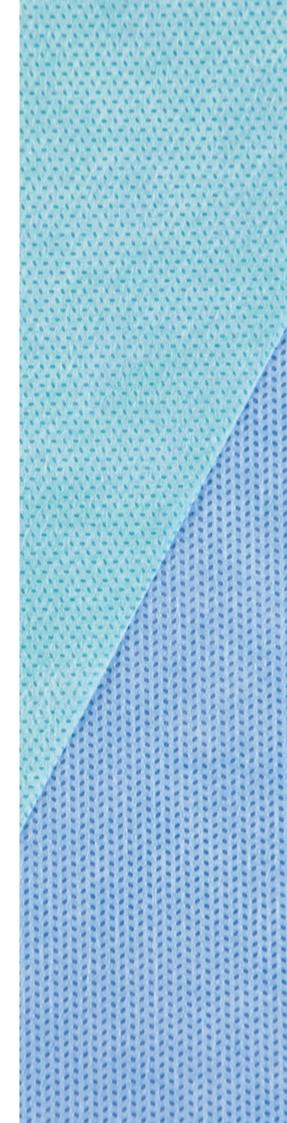
Ahlstrom Reliance® 440 – 43 gsm Colors available:



Ahlstrom Reliance® 450 – 50 gsm Colors available:

Ahlstrom Reliance[®] 460 – 60 gsm Colors available:





Ahlstrom Reliance[®] Tandem Simply better at every level.



Ahlstrom's interleaved sterile barrier systems solution. Ahlstrom Reliance® Tandem utilizes our newest technology, SMMMS, in combination with our existing technologies to provide the optimal combination for sequential wrapping. Interleaving is the concept of using two SBS sheets, each of which provides specialized performance via sequential wrapping.

Plays an important role in infection prevention

- Efficient sterilization of the package and maintains sterility until point of use
- Compliance with local and international regulations
- Allows for aseptic presentation of package contents

Is secure and easy to use

- Prequalified sizes, strengths and colors for wrapping materials
- Use of two colors clearly differentiates between the two layers in the operating room and during transport/storage allow damage to be easily seen
- Increases efficiency and productivity during wrapping and unwrapping of the packaging
- Ahlstrom highly recommends sequential wrapping as it creates a tortuous path, and delivers an aseptic opening

Provides the right solution for your wrapping needs

- Using Ahlstrom manufactured SMMMS, wetlaid nonwovens and crepe paper allows Ahlstrom to ensure the quality of Tandem packaging materials, from raw material to delivery of fabrics
- Aseptic presentation with safe sequential wrapping allows package contents to be presented with confidence
- Durability to resist tears and punctures
- Barrier to micoorganisms

Product Name	Combinations	Grammage	Technology	Applications	Colors	Sterilization methods
Reliance® 714	R310 S + R440	60 / 43	Crepe + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde
Reliance® 734	R335 + R440	52 / 43	Wetlaid + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde
Reliance® 735	R335 + R450	52 / 50	Wetlaid + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde
Reliance® 745	R345 + R450	57 / 50	Wetlaid + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde
Reliance® 765	R360 + R450	67 / 50	Wetlaid + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde
Reliance® 844	R440 + R440	43 / 43	SMS + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde, Plasma
Reliance® 845	R440 + R450	43 / 50	SMS + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde, Plasma
Reliance® 846	R440 + R460	43 / 60	SMS + SMS	Wrap	Green, Blue	Steam, Ethylene Oxyde, Plasma

Precautions for use

How to use:

Ahlstrom Reliance® wrap is for **SINGLE USE** only.

We provide the material in sheets of your specified sizes, enclosed within a protective sealed bag and supplied in a secure high quality box. An information notice is located within each box. Boxes are CE marked meaning that the products fulfill the essential requirements of the MDD.

Store in a cool, dry place, out of direct sunlight. Conditions should be within 15-25°C (59-77°F) and humidity 35-60%. Use within five years of manufacture, check manufacture date on label.

Location of use should be clean, dustfree, dry and away from fluorescent or ultraviolet lights sources.

Allow wrapping material to condition to atmospheric temperature and humidity prior to use.

Wrapping methods:

Sequential Wrapping is the **ONLY** technique we recommend.

This method provides many more barrier properties because of an effective tortuous path and allows an aseptic presentation.

The sequential wrapping of the medical device gives healthcare professionals the optimum combination of safety and performance.



Registrations and declarations:

MDD 93/42/EEC 1993 / 47EC5 2007:

Wrapping materials are considered a Class 1 accessory (self-certification) and complying with the essential requirements 93/42/EEC directive and therefore CE marked. All products are registered at « Ministère de l'Emploi et de la solidarité, direction des hôpitaux ».

Latex free:

The above products are latexfree – including synthetic latex materials or natural rubber materials containing any of the proteins linked to Types I & IV latex allergies.

EN 868-2:

Packaging material for terminally sterilized medical devices Part. 2: Sterilization wrap - requirements and tests methods (EN ISO 868-2:2009).



EN ISO 11607-1:

Packaging for terminally sterilized medical devices - Part. 1: Requirements for materials, sterile barrier systems and packaging systems (ISO 11607-1:2006);

Traceability:

The production system ensures complete traceability of products via a lot number printed on each delivered box, providing information relating to the production cycle. All data needed for effective tracking of a single box and identification is contained within the bar code on the box / packaging.



Safety instructions and disposal:

The product is non-toxic, nonhazardous and considered harmless.

Waste disposal must be in accordance with local and national regulations. Suitable for incineration. Product is not biodegradable.

The product is combustible in oxygen-rich environments and when a source of ignition is applied to the fabric. Therefore, to avoid fire, the product should be kept away from heat, sparks and open flame. If fire does occur it can be extinguished by normal means.

Precautions:

This is a single use product and shall not be re-used.

Do not use sheet if damaged or extraneous matter is detected.

Do not use with sharp instruments. These may damage the wrap and compromise barrier properties.

Stay ahead

Ahlstrom is a high performance fiber-based materials company, partnering with leading businesses around the world to help them stay ahead. Our products are used in a large variety of everyday applications, such as filters, medical gowns and drapes, diagnostics, wallcoverings, flooring and food packaging. We have a leading market position in the businesses in which we operate.



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