



Technical Absorbents

The Absorbent Solutions Provider

when absorbency is paramount



you're in **SAF** hands

World of Excellence in Super Absorbent Solutions

Technical Absorbents Limited (TAL) is a subsidiary company of China National BlueStar (Group) Company Limited, who are in turn wholly-owned by ChemChina, a Fortune 500 company.

Since inception in 1993, our core business has been the manufacture of Super Absorbent Fibre (SAF™) at our UK production site. We have also developed a wide range of SAF™ based nonwoven fabrics and yarns, which we can supply directly, leveraging the cost benefits of our vertical integration, or via one of our toll converters.

As a result, we have carved a unique position for ourselves as an absorbent solutions provider and our wide range of super absorbent technologies are suitable for a variety of applications in a number of new and established markets.


A Bespoke Service

We are proud to be able to offer bespoke solutions to exactly match customers' requirements. So, if you have an idea for a new product/solution, or you are looking to replace a technology you are already using, please contact us.

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Our Mission - "To be the global partner of choice for supply and innovation of super absorbent fibre materials through the excellence of our products, service and people."

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- **SAF™** is available in a wide range of highly absorbent grades
 - **SAF™** is a non-irritant
 - **SAF™** can be used in applications demanding robust toxicological profiling
 - **SAF™** is FDA and EFSA listed as an absorbent in food packaging
 - **SAF™** does not melt. It begins to decompose extremely slowly at temperatures $>200^{\circ}\text{C}$
 - **SAF™** can be blended with a range of synthetic and natural fibres to meet customers' end requirements.

SAF™ (Super Absorbent Fibre)

SAF™ is white, odourless and has the appearance and handling characteristics of a textile fibre. It has the ability to absorb up to 200 times its own weight in demineralised water and circa 60 times its own weight in saline, depending on salinity, at an extremely fast absorption rate and can easily be converted into a diverse range of nonwoven fabrics and spun yarn formats.

Being fibrous, downstream handling is easy. When converted, the **SAF™** distribution profile within final product constructions is extremely uniform. The result is consistent absorption performance and media integrity throughout.

SAF™ can be produced in a range of absorbency grades, staple lengths and decitex to suit different requirements. These benefits have made it the super absorbent of choice for many customers.

Super Absorbent Fabrics

We can supply **SAF™** converted products either in-house or via one of our toll converter partners. A wide range of lamination options are also available.

Needlefelt (Needlepunch)

We have our own development/commercial needlefelt line and can produce fabrics up to 2.0 metres wide. **SAF™** can be blended with a wide range of other fibre types to produce specialist fabrics in the perfect environment. Webs containing up to 90% **SAF™** can be produced at a wide range of fabric weights, typically between 150-1,000gsm. Short order trial runs can be facilitated where commercially viable.

Airlaid

SAF™ is routinely processed on all commercial airlaid production equipment. **SAF™** short staple grades (6mm) are typically blended with wood pulp and thermal bondable fibre. Airlaid webs with an excess of 65% **SAF™** content can be achieved at fabric weights of approximately 50-1,000gsm.

We are proud to be able to develop fabrics to exactly match customers' needs. To aid this we can use our own needlefelt machine (where applicable) for development activities.

We can offer exclusivity on bespoke materials and we can establish long term product development programs for Generation 1, 2 and 3 products.



SAF™ can be processed by all well-known staple fibre spinning systems.



Super Absorbent Yarns and Woven Materials

Yarns

Typically, SAF™ is blended with other synthetic fibres such as polyester, nylon, cellulose and aramids. These fibre blends are normally processed using the cotton and semi-worsted systems. A wide range of spun yarns can be produced using common spinning technologies, including Open End, Ring, Hollow Spindle, Repco, Dreft and Pavena.

Woven materials

SAF™ can be incorporated into woven materials and fabrics, after first being processed into a yarn. This allows the performance of SAF™ to be used in highly durable and long lasting woven, knitted and net structures.

Evanesce

(Soluble Fibre)

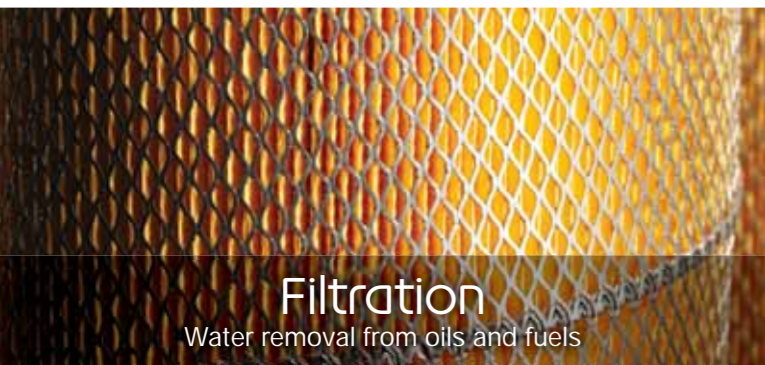
Evanesce is a water soluble fibre. It is a white odourless fibre with the handling characteristics and appearance of a textile fibre. Upon exposure to water, the fibre dissolves rapidly and completely. It can easily be converted into a diverse range of nonwoven fabrics and spun yarn formats.

Being fibrous, downstream handling is easy. When converted, the Evanesce distribution profile within final product constructions is extremely uniform. The result is consistent dissolution performance and media integrity throughout. Evanesce can be produced in a range of staple lengths and decitex, to suit different requirements.

- Evanesce is soluble in water and water-based solutions
- Evanesce is a non-irritant
- Evanesce does not melt. It begins to decompose extremely slowly at temperatures $>200^{\circ}\text{C}$
- Evanesce can be blended with a range of synthetic and natural fibres to meet customers' end requirements.



Applications



Filtration

Water removal from oils and fuels



Medical

Exudate management and carrier fabric



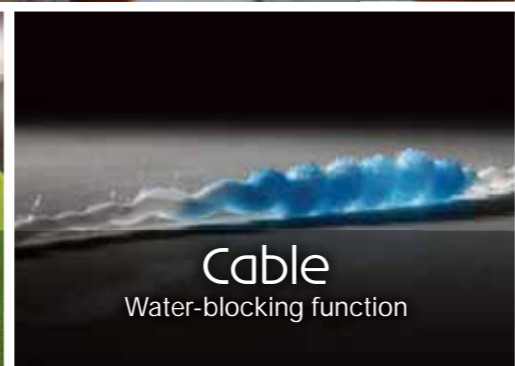
Hygiene

Disposable and washable absorbent solutions



Apparel

Sweat management and cooling fabrics



Cable

Water-blocking function



Food Packaging

FDA and EFSA listed absorbent



Bespoke



Horticulture

Water management fabrics

Accreditations

TAL has endeavoured to achieve excellence throughout every aspect of its business. This has been recognised externally with the following accreditations:

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- OHSAS 18001 Occupational Health and Safety Management



FM 600823



EMS 600824



OHS 600825



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