

WOOLCOOL®



Pioneering change

Wool was not only the genuinely environmentally responsible solution, but from the very first trial the performance proved it as a far superior insulator than the alternatives.



Woolcool® Origin Story

Abundant, sustainable, biodegradable and with unique natural properties, wool is Nature's Smart Fibre. For protective and temperature regulating packaging, wool provides the natural, renewable and truly sustainable solution.

The Woolcool Origin Story dates back to early 2000s when we became the pioneers of the sustainable packaging revolution. **Our founder, Angela Morris**, was working as a consultant with the National Trust, advising their tenant farmers on packaging and branding for a wide range of produce.

Angela Morris was then given a specific brief to create an environmentally responsible alternative to polystyrene and polyethylene boxes for the shipment of farm-fresh produce.

The solution had to be both genuinely sustainable and provide high performance, making it suitable for deliveries direct to the consumer, nationwide, maintaining the produce temperature below 5°C for a minimum of 24 hours.

As the only commercially available solutions at that time were non-sustainable options such as foil bubble-wrap or fossil fuel based material such as Polystyrene boxes, the challenge was on. As it's in our blood not to shy away from a challenge, an in-depth process of research and prototyping ensued, reviewing materials, developing liner designs and box sizes. This led to a series of temperature trials with the different potential solutions.

With the performance qualified and Wool identified as the material, the project with the National Trust was complete. It all started in The Lake District at Yew Tree Farm, Borrowdale, with a box to deliver Herdwick lamb by courier direct to the consumer.

Over the next few years, with the emergence of the online food market, it became evident that there was a growing demand for Insulated Packaging. This, combined with word of mouth spreading about Angela's innovation, saw an influx of enquiries asking how to buy this new solution. As a result, Woolcool was officially born in June 2009. Since then, the market for direct deliveries of fresh, frozen and ambient food and beverages has seen rapid growth, increasing the need for a simple and reliable insulated packaging. Finally there is mainstream recognition of the importance of sustainability within a business, and in our case, of sustainable packaging. This is an ethos that Woolcool has always promoted and is at the very core of its values, many years before sustainability became a 'trend.' Created by nature, Drive by Science, substantial investment in research and development of Woolcool and the importance of scientific understanding of its performance, along with partnering with top UK Universities such as Cambridge, Bangor and Keele, has provided Woolcool with the expertise and product range to expand our high performing innovation into the Pharmaceutical Industry for the shipment of temperature sensitive medicines and medical devices.

Woolcool continues to go from strength to strength and has now become the packaging of choice for many who are looking for high performance, sustainable and cost effective insulated packaging.

Woolcool has received a number of high profile awards, recognising both the innovation of the product and also the ethos of the company as a whole.

We certified as a B Corp in February 2020 and are now two-time winners of the Queens Award for Enterprise in Innovation (2018) & Sustainable Development (2022) categories.

2009

Prior to 2009 Angela Morris develops a wool insulated box for National Trust farmers to safely deliver fresh food direct to customers. Demand means that Angela opts to focus efforts on her innovation and sets up the Wool Packaging Company and the brand Woolcool.

2010

Woolcool develop the Pouch Solution, supplying into Fortnum & Mason for their hampers. Numerous awards won including The Observer Ethical Award, Green Business Awards and UK Packaging Awards.

2011

Innovate UK funding to begin the development of solution for the Pharma market.

2012

Collaboration with two leading Universities; Bangor University to investigate Wool as an insulating material and Leeds University on TSB Product Development Project for Pharmaceutical. First Pharmaceutical customer, Henry Schein launches Woolcool at World Veterinary Congress.

2013

Huge investment in two Climatic Chambers to thoroughly travel test our solutions to industry profiles. Innovate UK funding for research and development of the Woolcool product for the Pharmaceutical Market.

2014

New Woolcool Website and Brand Identity Launched. Innovate UK funding for further development and prototyping of the Woolcool product for the Pharma Market.

cont...

WOOLCOOL®



Why Woolcool®

The history of the humble domesticated sheep dates back to between 11000 and 9000 BC, with evidence that they arrived in Britain around 4000 BC.

Sheep are thought to be one of the first animals domesticated by humans. As a result, the properties of the Wool fibre have evolved over thousands of years to become an extremely effective and efficient regulator of temperature, which protects the sheep from the ever-changeable climate extremes. Woolcool insulation is made using 100% pure sheep's wool. Wool is sustainable, compostable.

Woolcool insulation is more effective than alternative solutions at regulating the temperature of products in shipment for longer, using less material.

The biodegradability of the Wool means that at the end of a Woolcool liner's life, if it's not recycled or reused for another purpose, the Wool component can be returned to the soil, where it decomposes, releasing valuable nutrients into the ground. Regardless of where the liner ends up, even if ultimately this is in landfill, within 6-12 months, the Wool will have broken down, never to be seen again. As well as significantly reducing our packaging waste to landfill, the Wool reduces the number of spoiled Food and Pharmaceutical products, by maintaining the temperature of products in storage and transit. With continually investment in R&D, we aren't stopping there. We see a world where the right materials are being used, for the right application, fully research from cradle to grave. That is our commitment.

In the last year alone, our solutions have saved the equivalent weight of 21 Blue Whales of Polystyrene from going to landfill.



We are proud to design, innovate and manufacture in the UK and are committed to keeping it that way. It is also key to us that we continue to be Research and Development led, always pushing to improve our product offering, performance and business processes, pioneering and innovating in the market. To Woolcool, the quality of our product and the service and experience we provide to our customers are of the upmost importance and at the forefront of what we do. Using natural materials to change the world, we want to be the leaders, setting the bar in providing the most positive customer experience we can. We take a collaborative approach with our customers, being as flexible as possible in order to support the constantly evolving demands of the Food and Pharmaceutical markets. Over the last two decades, we have heavily invested in optimising our product, becoming experts in our field to provide our customers with well-informed, industry leading knowledge and experience.

We are conscious and active in ensuring our impact environmentally and socially on both the local and wider community is positive. Socially, Woolcool actively engages with the local community, supporting individuals, schools and charities. We know the importance of maintaining a progressive and supportive company culture, promoting development of our team members both professionally and personally. Environmentally, Woolcool is active in a number of Environmental groups, including the NMA, BBIA and SBEN. We are B Corp certified and hold ISO 14001 certification, demonstrating we are practicing what we preach. We have recently conducted a circular economy investigation to highlight the areas where we can further improve our impact. We offer a market leading return scheme so we can achieve maximum reuse out of our Woolcool products.

Our core values include Responsibility and Legacy, recognising the importance of ensuring the Woolcool legacy is positive, managing the impact of our company and product, both now, and for future generations.



We believe that a business has a responsibility to conduct itself respectfully and fairly, using its platform to contribute positively, taking collaborative and supportive approach with all of its stakeholders, including its team members, suppliers, customers and wider community.

2015

UK Woolcool manufacturing facility established. Woolcool collaborate with Cambridge University on Pharmaceutical based project.

2016

Woolcool achieved ISO 9001 and 14001 standards. Sentinel Business Awards Winner - Science & Technology Award. Global Launch of LifeGuardian at Cold Chain Europe 2016, Frankfurt Germany.

2017

Staffordshire Chamber Business Awards Finalist - Environmental Award 2017. Staffordshire Chamber Business Awards Winner - Small Business of the Year 2017. New Website Launch.

2018

The Queen's Awards For Enterprise Awarded - Innovation 2018. Woolcool® Paper Pouch launched.

2019

Royal visit by HRH Prince of Wales to celebrate Woolcool's 10th anniversary.

2020

One of the only UK packaging manufacturers to earn B Corp status.

2021

Woolcool® expansion to new manufacturing site on Tungsten Park, Stone.

2022

Awarded The Queen's Award for Enterprise Sustainable Development 2022. Woolcool's Managing Director, Josie Morris, awarded an MBE. New brand 'Hortwool' launched.

WOOLCOOL®



Certified
B
Corporation

Performance

Wool is one of the most amazing smart fibres known to man, boasting many favourable characteristics. The most important for our application are the Wool's insulative properties. Ever since the pioneering early days in development of Woolcool, our ethos has been to trial and test to the nth degree to ensure performance. We have invested and continue to invest significant resource and funds into understanding our materials, our product and temperature control, meaning our customers can have full confidence in Woolcool when shipping their products.

From fresh foods, frozen ready meals and chilled beverages to vaccinations, insulin and generic pharmaceuticals, Woolcool has been tirelessly trialled, tested and qualified, providing solutions to maintain internal product temperatures in various ranges including below 5°C, 2-8°C and 15-25°C from 12 to 72 hours and beyond.

We have partnered with some of the top UK Universities, including Cambridge, to understand the science behind our product and apply this to optimise the packaging for our customers.

The key factor in any shipment of temperature sensitive goods using passive packaging is that the product performs; if the insulation fails it can be detrimental to a business' retention rate, reputation and ultimately the bottom line. The same ethos is core to Woolcool today and so **all of our products are rigorously tested to meet the many variables and challenges of temperature sensitive shipments.** We do not only test Woolcool against the easy, mild profiles; we put the wool through its paces, qualifying our packaging to the extremes of climate, including ISTA 7D profiles, to ensure our customers can rely on the performance of Woolcool packaging all year round.

We have decades worth of testing and data, which is all fully accessible to our customers. Better still, as temperature control is specific to a company's own unique chain, our in house testing and R&D facilities mean we are flexible enough to reflect any customer's own temperature profile, ensuring the solution is tailored to your unique requirements, not against a generic assumption.

As an added bonus, particularly in shipments using Ice Packs, Wool fibres are hygroscopic, absorbing moisture and condensation in the box reducing damage to your products and thus your customer's experience. They are also elastic and will recover their original shape, meaning any compression within the packaging from your product in the box or pouch is quickly returned back to the norm. Not to mention the positive and unrivalled environmental credentials of Wool being natural, compostable, sustainable, reusable, renewable and recyclable...we could go on...



Why compromise on performance or sustainability when you can have both?



WOOLCOOL®



Pure wool



Looks like wool, smells like wool... How does the Wool get from the Sheep to Woolcool?

After being sheared, all of our Wool is washed and scoured in the UK to ISO 9001 and 14001 standards. All wool sourced is heat-treated and no harsh cleaning chemicals are used. The wool travels through a series of hot baths where it is washed and scoured using only hot water and a mild detergent. It then goes through industrial dryers. This process means our wool is completely clean and suitable to use with food and pharmaceutical products, but does not carry any nasty toxins or chemicals.

Yes, it smells like Wool... Questions around the smell are usually linked to worries about cleanliness and linking the smell to the toxins or thoughts of farms. However, all our Wool is washed and scoured to ISO standards to ensure cleanliness. We perform monthly tests to ensure it is completely clean and free of any toxins that can leach into the products being shipped.

As with any material or object, man-made or natural, it has its own smell.

Typically, if the Wool has been stored with other wool, it will smell stronger, but once it has been taken out of the initial delivery box, that smell will dissipate. To remove the smell we would have to add chemicals to the material, which would negate our natural product and could potentially damage the fibres. Of course, we love the smell, as what better way is there to prove our product is 100% natural?!



Our wool is completely clean and suitable to use with food and pharmaceutical products





Ethics & Sustainability

Using natural materials to change the world...

Where does Wool come from?

We use 100% pure sheep wool. As an ethical and environmentally responsible business, we are very sensitive to the welfare of animals and in particular sheep, from which our amazing, sustainable insulated packaging material is made.

We have a lot to thank the Sheep for! Adult Sheep breeds that do not shed their wool naturally, need to be sheared for welfare reasons; a heavy fleece not only causes a sheep to over heat in the summer but can provide an ideal environment for parasites on the sheep. The RSPCA advise that a sheep must be shorn at least once every year for their own health, to keep them comfortable and free from parasites. To ensure the sheep is handled carefully and correctly, shearing can only be carried out by a licensed shearer.

We believe in the right material, right application, fully researched from beginning to end of life, no knee jerk reaction or jumping on a greenwashing bandwagon.

Woolcool continues to research, develop and evolve to ensure we continue to be leading the pack in offering sustainable solutions.

Choice of materials.

Packaging has a really important role to play. It protects, informs, extends shelf life and reduces product wastage. We make sure we are educated on all areas of its impact, whether its start of life, end of life, carbon footprint, energy or water usage and beyond, ensuring what we are using is environmentally responsible and optimised.

Wool

100% Pure Wool is a super-smart insulator that is natural, compostable and biodegradable. However, you can be super-smart and reuse around the house, in the garden, place in your garden waste bin or even send back to us at Woolcool. Created by nature, driven by science. #letsboxclever

Paper/Cardboard

All paper and cardboard we use is FSC. We strive to optimise the amount of material we use in all elements of range. Our box range is tested to be strong enough to keep your product protected, but not to unnecessarily overuse a vital resource aka trees!

Plastic

Our 100% Pure Wool liner is protected by a recyclable plastic outer. This increases reusability and ensures we are adhering to Food and Pharma safety standards. You can simply dispose of this in your household recycling or drop at a collection point.

Our ethics.

Our impact, our responsibility is our mantra. We know we aren't perfect, however we can always strive to be better and improve our impact on the wider world both socially and environmentally.

We recognise that our actions alone won't change our climate course, however we do believe in the power of the collective. If everyone does something small, the impact is massive.

We strive to shape our decisions based on the UN Sustainable Development Goals, achieving the Queens Award for Enterprise for Sustainable Development in 2022. Check out our website for updates on this journey!

Our values

Belief | Honesty | Responsibility | Empathy | Innovation | Legacy

We have 5 key Woolcool Pillars which are underpinned by our commitment to innovation creativity, along with exceptional quality and service, both in terms of our company activities and our continual development of our products.

Our Team | Our Customers | Our Processes | Our Environment & Community | Our Finance

What does B Corp mean?

We're proud to be the first packaging company of our kind to achieve B Corp certification in the UK. We believe in business as a force for good and that if every business makes a small step, together we can have a major impact.

It was a rigorous and detailed process to certify. We know we are far from perfect, however our commitment is to strive to continually improve our product, process and partnerships to ensure we have the ability to sustain into the future.



[woolcool.com/pioneers](https://www.woolcool.com/pioneers)

Aim to reuse

If you aren't looking to re-use the Woolcool Liners, simply remove the plastic liner, this can be put in with the standard plastic recycling, then the wool liner can go into either a compost bin (if available) or dug into the soil in the garden; the wool will release valuable nitrates back into the soil as it breaks down.

Some local authorities will accept the wool in household garden waste bins, it is just a matter of checking with the local council to find out what recycling facilities are available in your area. Even if the wool is going into the general waste, it will break down in landfill. We have also launched a market leading return scheme allowing Woolcool user to return the liners to Woolcool for re-processing to new Woolcool liners!

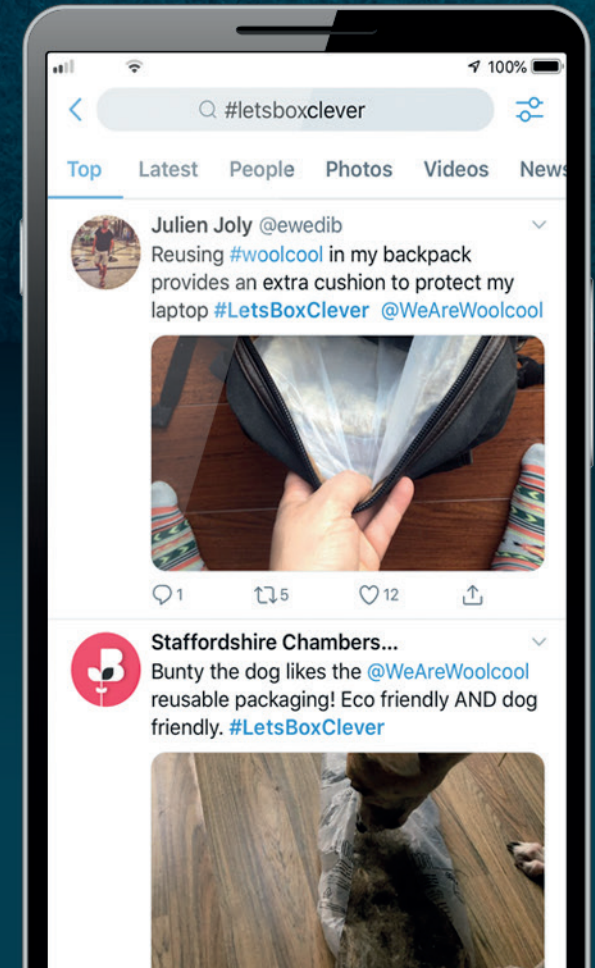


There are a number of ways you can reuse/recycle the Woolcool liners including...

- Protection for plants/flowers/trees from frost
- Feeding roses and keeping slugs off plants
- Keeping takeaways warm
- Keeping drinks/food cold on the beach
- Donation to homeless or animal shelters
- Van/Car lining
- Pads for kneeling when gardening
- Picnic hampers
- Hanging baskets
- Pet baskets
- Cushion stuffing
- Homework projects
- Craft projects
- Pipe lagging
- Draught excluders



We are always looking for new and inventive ways and suggestions of re-using Woolcool. Post these on social media using [#letsboxclever](#)





WOOLCOOL®

Adding value

PIONEERS OF
100%
PURE WOOL
PACKAGING



BESPOKE SOLUTIONS



TEMPERATURE PERFORMANCE



LIGHTER PACKAGING TO TRANSPORT



TRACEABILITY



REMOVE TEMPERATURE CONTROLLED VEHICLES



FREE SAMPLES



TEMPERATURE REGULATOR



SUSTAINABLE NATURAL SMART FIBRE



TIME PERFORMANCE



FEWER ICE PACKS



TECHNICAL SUPPORT



VALIDATE WITH CONFIDENCE



SUPPORT UK MANUFACTURE

100%
PURE WOOL



GREATER RETURN ON INVESTMENT



TESTING FACILITY



GREATER LOAD SPACE



EXPERTISE IN PACKAGING



EXCEPTIONAL CUSTOMER SERVICE



INCREASED EFFICIENCY/PRODUCTIVITY



ABSORBS MOISTURE



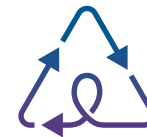
ADD TO CORPORATE & SOCIAL RESPONSIBILITY



100% PERFORMANCE



SMALLER PACKAGING TO TRANSPORT



REUSE, REDUCE, RECYCLE



INTEGRATION INTO EXISTING WORKFLOW



NATURAL MATERIAL