

Recycle head coverings and reduce your environmental impact by 100%

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For several years the food industry has been searching for ways to recycle the many millions of mob caps and other disposables used to help safeguard food quality.

These single use items are not bio-degradable and therefore cause considerable damage to the environment and end up as either refuse derived fuel (RDF) or land-fill – both with associated costs of disposal.

With 500,000 people employed in the food industry, allowing for agency staff, multiple use per day and weekend working, ABurnet estimates 201 million mob caps every year are used in the UK food processing industry alone. At 3g per 12gsm (grams per square metre) mob cap, that is a mass of 605 tons every year going into RDF or landfill in addition to the product's environmental costs of production.

Further research needed

Combine this environmental cost with the industry questioning why mob caps of the same weight can be of such variable quality and there was a clearly identified need for further research and product development.

Founded in 1898, ABurnet Ltd, the world's leading manufacturer of hair containment products for the global food industry, com-

The standard KleenCap.



missioned a two year research project with The University of Bolton, England, to:

- Understand how to contain hair under head coverings.
- Develop fabric structures to effectively control hair at minimum cost.
- Test and publish ways to rank hair containment headwear by their performance.
- Ensure the environment was a key driver throughout the development process from concept to final production.

“We are highly pleased with the results of the collaboration with ABurnet's technical teams,” states Professor Subhash Anand, MBE, Professor of Technical Textiles, Institute for Materials Research and Innovation, University of Bolton, UK.

“The resultant products and systems both contain hair up to 11 times better than a mob cap alone and can stop the environmental damage from mob caps all together – with no extra cost to industry. Good hair containment is no longer based on supposition; it is now the science it should always have been.”

New HairGon compatible KleenCaps by ABurnet offer improved hair containment over mob caps and can be re-used multiple times before being recycled on site as wipers in appropriate areas due to their good absorbency. This enables a 100% environmental saving on materials. Re-use is further enhanced using HairGon, an advanced formula wash additive that dissolves residual hairs in the wash.

How does it work?

Research found that hair, as well as needing to be held, is pushed up through all fabric structures due to the mechanical forces applied when fidgeting or adjusting headwear. Hair is pushed up through the needle gaps in both knitted and woven fabrics and the inherent gaps found in the variable density of all spun non-woven fabric structures such as those used in mob caps.

Technical hair barrier products were then developed to overcome these identified problems and meet the three identified requirements to contain hair, namely:

- Hold the head of hair.
- Positive attraction to help hold onto



The KleenCap Max incorporating Staycool technology.

shed hairs, helping to prevent food contamination.

- Anti-slip feature to help hold any protruding hairs.

For user acceptance, comfort, softness and breathability were identified as additional key requirements.

Better hair containment

Guided by the University of Bolton, ABurnet's technical teams developed HairBarrier fabric structures that were incorporated into different products.

These products were tested for both their hair containment effectiveness and staff acceptance. Compared to mob caps, the resulting patent pending Kleen Caps both contain hair up to four times better than a mob cap and cost no more than a mob cap in use. This can be increased to 11 times better hair containment when worn with a HairTite Hi-Care HygieNet, costing the same as traditional mesh hairnets.

Staff preference

KleenCaps with HairBarrier technology are also available with Staycool technology that, like sportswear, wicks away moisture to the atmosphere. This helps keep workers com-

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portable in both cold and hot environments and where performing jobs with higher and varying levels of physical activity.

In trials, people preferred wearing KleenCaps over mob caps finding them both cooler and softer to wear.

Re-use and recycle

To help the environment and make a technical Hair Barrier product cost effective, KleenCaps can be washed and re-used with HairGon. This is a patent pending advanced formula wash additive that dissolves residual

hairs and helps remove pathogens, meaning that for the first time ever HairGon compatible headwear can be re-used with confidence.

Wash colour code stripes, integral to the fabric structure, allow easy control of use, whilst a system of process control validation ensures a safe and effective quality assured wash process.

ABurnet have a complete wash system to minimise product handling, making it similar to that of a disposable product choice.

Due to the ease of operation, many food processors self launder, however companies have the option to use their preferred third party laundry if they wish.



This mob cap shows it ballooning away from the head on the wearer's right side, which is one reason why they do not contain hair well as nothing is held.

Find out how much you can save

For a limited period, ABurnet are offering full training and support to food companies wishing to trial KleenCaps and HairGon. Food companies can then see for themselves their own improvement in hair containment and reduced expenditure on fines and their overall cost saving achieved.

To take part, contact Rob Singh or Richard Burnet now on +44 1332 874797 or e-mail info@aburnet.co.uk stating KleenCap with HairGon trial. Product will be supplied via your chosen distributor.

ABurnet offer a full range of hair containment products, supported by staff education and training aids such as enclose all your hair multi-lingual posters, many of which are completely free to users of their products.

A suite of free hair barrier tools can be downloaded at www.aburnet.co.uk/free-tools.

Save money

With companies being fined £25-50 per hair complaint, changing from mob caps to HairGon compatible KleenCaps has been proven to both improve hair containment and reduce fines, thereby saving food processors money. At the same time this both enhances brand image and the customer relationship. ■