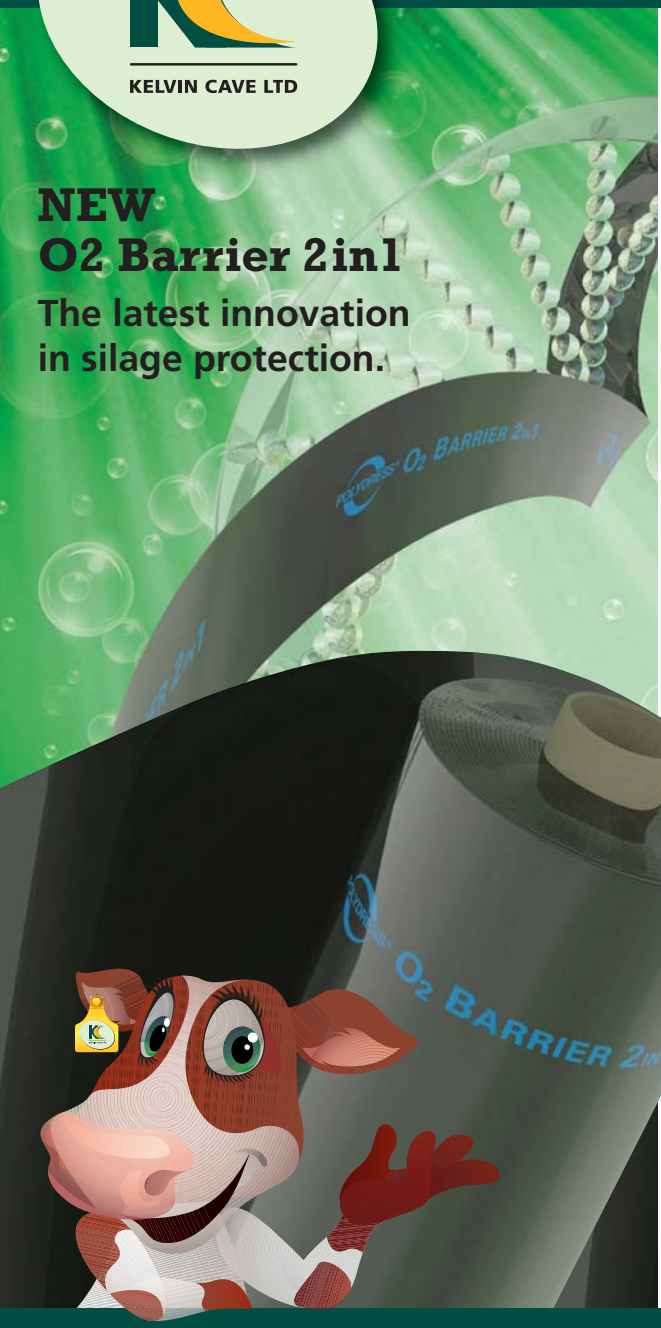
KELVIN CAVE LTD

Autumn 2012 Newsletter

Increasing on-farm efficiencies

NEW O2 Barrier 2in1

The latest innovation in silage protection.



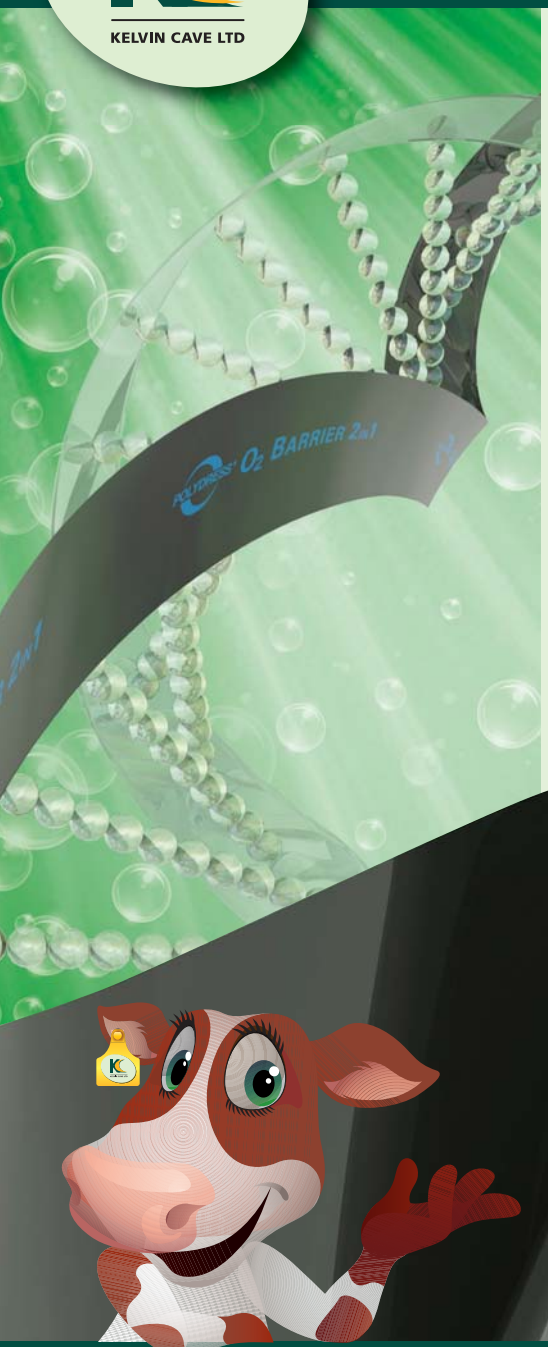
Tyre no more ...

Products you can trust

T : 01458 252281 E : sales@kelvincave.com
www.kelvincave.com

O2 Barrier 2in1 • NEW • ClampTile

KELVIN CAVE LTD



The world-first silage sheet/vacuum film combination. One sheet transforms into two on the clamp!

More effective clamp sealing with reduced workload.

Better silage - up to 10 fold increase in oxygen barrier
- long term preservation
- reduced losses*

Save time - cover silage in one step

Save effort - reduced product weight*

* Compared to standard sheeting.

O2 Barrier 2in1 combines an innovative formulation of polyethylene silage film and polyamide vacuum film in a single sheet.

This unique product is only 100µm thick but offers up to ten times less oxygen-permeability, and at least as much strength, as conventional sheeting systems - ensuring the rapid formation and sustainability of anaerobic conditions in the clamp.

The silage and adherent vacuum film combination, being 40% lighter, allows for quick and easy sheeting of a clamp. Within a short time of being laid the vacuum film separates from the top film as it absorbs moisture from the silage and is then sucked down onto the silage surface, creating an airtight seal.

When the clamp is opened the two sheet layers are separated completely and can be recycled or disposed of. Recycling and disposal costs are reduced due to the reduced weight compared to conventional sheeting.

Contact your Sales Manager to discuss the benefits of the new O2 Barrier 2in1 system and ask about our new ClampTiles as well, or check out our website.

Kelvin tyres no more !!!

On his own farm, Kelvin hates the mess of tyres all year round. He doesn't like the dirty water they hold, or the midges that breed in it. Putting tyres on the clamp means an inevitable drenching and being eaten alive by the midges! And when they're stacked off the clamp they make a great hiding-place for rats!

But no more ... developed with a local South West firm, using 90% recycled materials and with a life expectancy of 15 years, ClampTiles measure 1,000 x 600 x 20mm and weighs in at 20kg/m^2. Easily stored on a pallet and carried with the aid of a moulded hand grip, these tiles provide even, effective and secure weight across the whole clamp. A complete covering of ClampTiles will ensure the birds don't peck holes in the silage as well!

Discuss ClampTiles with your Sales Manager – ideal for use with ClampFilm and O2 Barrier 2in1.

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Andy's Answers

Technical Director

Cereal harvest is still underway in some parts of the country. With the prospect of high concentrate prices for the foreseeable future it makes sense to get the best out of homegrown cereals.

I've missed the ideal crimping moisture window, what are the alternatives?

Research dating back as far as 1918 has shown that cereal grain is at its maximum nutrient value and digestibility just after the plant stem below the ear dies, and grain moisture content is between 35% and 45%. Grain harvested at this stage can produce significantly more DM yield per hectare, of greater feed value, than grain left to dry in the field. Crimped, treated with an effective preservative like Crimpstore, and ensiled or bagged, this grain can have a big impact in terms of reduced reliance on bought-in feed.

It's still possible to crimp and ensile your grain, although you may not get quite as much out of it in terms of nutritional digestibility. If it's above 25% moisture you can treat with Crimpstore applied at a higher rate. If below 25% it can still be ensiled, and using Crimpstore Hi-dry will ensure good stability of grain during feed-out. As with any ensiled feed, attention to detail during the ensiling process and at feed-out will pay dividends, so ensure good compaction and sealing of the clamp to exclude air, and minimise disturbance of the clamp face as grain is removed.

If you have a good, dry grain storage area, rolling grain from 15% to 25% moisture and treating with non-corrosive Propcorn NC offers another effective, well-proven storage alternative.

What about urea treatment?

Treating grain with urea can be an effective method of preservation, and can increase the level of 'protein' in the grain. This may seem an attractive option, but is not without risk. The 'protein' is actually ammonia, which can be used by rumen bacteria to grow and produce more microbial protein. However, in order for this to be effective the ration must be balanced very carefully to ensure all the ammonia is used in the rumen. Excess, unutilised ammonia, will be absorbed into the animal's bloodstream where it is toxic, so the liver has to use energy to convert it back into urea so that it can be excreted. Excessive levels of ammonia have been shown to reduce DM intake, and can also reduce herd fertility by causing foetal re-absorption.

Remember, your grain is an important, starchy energy resource for your cows, so using a treatment that can limit the amount you feed may not be the best option. Leaving yourself the flexibility to feed an effective amount of grain correctly balanced in the ration with protein and minerals to complement your silages, is likely to have the best long-term effect on herd health and profitability.

Digest-it® Saving over 66% in fuel alone - Mark Bowes

Mark Bowes and his wife Judith, of Townfield Farm, Cheshire, started on the farming ladder with a Cheshire County Council farm of 30ha initially, scaling up to 80ha and a herd of 130 dairy cows.

With 9 years experience, Mark has identified the management of slurry as one of the key problem areas in successful dairy farming. The Bowes' farm suffered from common lagoon problems - a thick surface crust preventing rainwater penetration, sediments on the bottom and an unpleasant odour. Mark said this all contributed to creating thick slurry which was then difficult, costly, and time consuming to stir and pump.

Mark therefore consulted his nutritionist, who recommended applying a biological additive to digest the slurry and increase its overall fertiliser value. The first weekly dose of Digest-it was added to the Townfield Farm lagoon in November 2009.

After 6 months using 'Digest-it,' the contents of the lagoon were transformed from crusty and inefficient waste, to a bubbling liquid fertiliser high in nutrients. The sediments at the bottom of the lagoon were broken down, making the slurry easier to stir and pump.

In 2010 Mark noted a fuel cost saving of 66% when stirring the slurry at Townfield Farm, stating that "it only took 4 hours to stir our lagoon - it used to take 12 hours, so only 40 litres of diesel was used instead of 120 litres."

The nutrient value of the slurry also improved significantly, with an increase of up to 39% in key nutrients including Nitrogen, Potassium, Magnesium and Sulphur. As a result, the slurry increased in fertiliser value by a dramatic £65.52/ha, resulting in an overall cost benefit of over £2,000 per annum to the farm. Since using Digest-it, Mark has been able to reduce the amount of bought-in fertiliser by 9 tonnes per year, crucial given the massive increase in fertiliser prices in recent years. He has been able to use this saving to help reduce costs at a time when other dairy farmers are struggling to justify the current costs of fertiliser.

Another benefit identified by Mark has been the reduced odour from the lagoon. "After 3 months there was no smell when we stirred and pumped."

Kelvin Cave, Managing Director of Kelvin Cave Ltd says "Digest-it is an innovative fermented culture product that is at the cutting edge of environmental standards. It contains a rich source of vitamins, minerals, proteins, enzymes, amino acids, carbohydrates and dormant organisms that effectively compost the slurry and convert it into fertiliser that can be put back on the land. In effect, Digest-it provides a rich food source for 'good' microbes in the lagoon as well as introducing dormant aerobic bacteria species, which 'wake up' on coming into contact with slurry, to support the digestion process."

After the first 12 months of using Digest-it, Mark Bowes was very pleased with the results and was looking forward to seeing results in the second year. "I would highly recommend Digest-it to dairy farmers looking to improve the efficiency of their slurry management," he says.

Now in 2012, Mark has not looked back. "It now takes approximately 2 hours to stir my lagoon. Our contractors use the umbilical system, it pumps easily, with no blockages, in less time, and saves us fuel." he states.

He added, "I am able to store slurry for 12 months so that it can be used more effectively at optimum times, and my fertiliser costs have not increased, even though I have now scaled up to 122ha." Mark concludes, "Digest-it has been a major contributor in time and cost saving for both me and my contractors."

Digest-it, proven on UK dairy farms, is now being trialled on pig farms in the UK. Please ask us for the latest results when you speak to us.

Contractors can assist their customers in cost saving and manage their own time and costs more efficiently by recommending Digest-it with confidence. Speak with Kelvin Cave Ltd to find out how.

Biological Slurry Digester for better soils, crops and stock

Digest-it®

- Reduces fertiliser costs
- Gets your slurry tank or lagoon working
- Stimulates aerobic microbial activity
- Converts solids into plant available liquid nutrients
- Digested slurry improves soil fertility

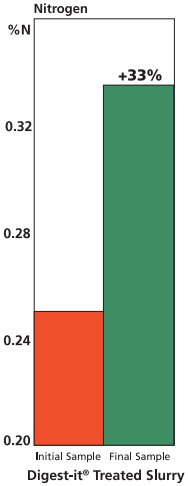
UK Dairy Farm 2009/10 Winter Trials...
Digest-it® was tested on 15 UK Dairy Farms.

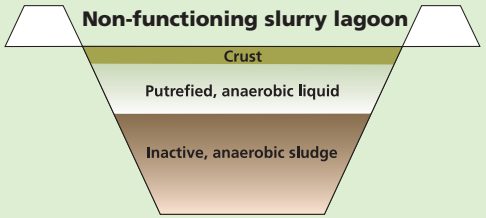
Average results from this extensive testing showed...

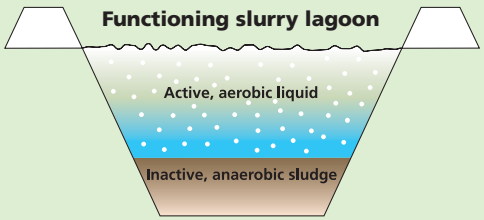
Digest-it® increased slurry fertiliser value
- Nitrogen +33%
- Phosphorus +28%
- Potassium +34%

Financial Value
+ £52.32/ha

Cost-effective Ratio
3:1 £ return







Safesil™ gets the thumbs-up from farmers - Andrew Guilding

KELVIN CAVE LTD

Saucy Sally's
recipe for the **best** silage

Safesil™
- The best silage preservative for nutrient retention
- The best for guaranteed* aerobic stability
- The best for eradicating silage spoilage organisms
- **The best return on your investment**

*Journal of Dairy Science 94:824-831

Andrew Guilding, first used Safesil when he was farm manager for F.E. Hill & Son, Stockland Lovell, Somerset, treating 2,600 tonnes of maize silage and 750 big bales of grass haylage in 2010.

"The results were impressive, with less than a wheelbarrow-full of waste from the maize and equally superb quality and aerobic stability in the haylage. With 305-day milk yields in excess of 9,000 litres, high quality silage which doesn't heat up at the clamp face or in the TMR, is vital to the success of any dairy herd. Safesil did a better job than anything I've tried before and with its proven ability to reduce fermentation losses to less than 2% by inhibiting all the bugs that use up valuable nutrients, it's already become 'a must' for all my silage. When I see what we have saved with Safesil the extra cost of treatment is insignificant."

Now running his own unit at Culver Street Farm, Burton, and also managing the silage-making for F.G. Jeans & Sons, Currypool Farm, Spaxton, Somerset, Andrew continues to use Safesil on all the silage he makes, with consistently excellent results.

Safesil silage preservative is a special blend of human food-grade ingredients which eradicate and control all the major silage spoilage organisms, minimising fermentation losses and reducing yeast and mould numbers to very low levels.

Unlike inoculants which claim to out-compete the natural bugs (enterobacteria, clostridia, yeasts and moulds) that use up nutrients during fermentation and when the silage is exposed to air, the preservatives in Safesil destroy them. The result is a clean, efficient fermentation from the remaining lactic acid bacteria. Because these bacteria do not have to compete for fermentable sugars they can do their job of lowering the silage pH very quickly, leaving more sugar and limiting protein breakdown, resulting in more, higher quality, dry matter in the clamp. Extensive trialling has shown that dry matter loss in the clamp is typically less than 2% with no sign of heating for 260 hours after exposure to air.

2012 has been one of the most difficult years on record for producing quality forage, but opportunities to make up the quality shortfall could still present themselves in the next couple of months.

Third and fourth grass silage crops can often produce good protein levels, and if we get a bit of an 'Indian Summer' may even reach respectable dry matter levels of around 30%. Maize silage, which is frequently prone to wasteful aerobic instability, will also benefit from Safesil treatment. By ensuring a clean, rapid fermentation of these later cut silages and eliminating spoilage organisms, farmers like Andrew are discovering that Safesil can be relied on to produce results every time.

SilaPactor Don't leave the yard without it - Ian Maddever

Ian Maddever runs IDM Contracting and focuses on silage production and specialised forage harvesting operations within a 50 mile radius of Liskeard, Cornwall. Working with a Claas 940 forage harvester equipped with telematics and a comprehensive range of mowers, tedders and trailers, Ian is able to provide his customers with detailed information about the quality and yield of their crops.

IDM Contracting has built its reputation on efficient, effective harvesting, so it was only natural that Ian progressed to consider the quality of the forage produced and how his service could help his customers retain its feed value. At the 2011 Dairy Event Ian saw the SilaPactor, a new introduction to the UK by Somerset-based Kelvin Cave Ltd.

The 4 tonne, 3 metre wide SilaPactor can increase silage dry matter compaction density by up to 40%

when compared to conventional tractor clamp rolling, resulting in less air in the clamp, better fermentation conditions and better use of clamp space. Ian was impressed by the results obtained by European farmers using the SilaPactor. They are achieving compaction densities of more than 300kg DM/m³ with this implement, compared to typical values of 180-220kg DM/m³ in UK clamps using conventional compaction techniques, and, because it compacts efficiently across its 3 metre width, considerable fuel savings are also possible.

The SilaPactor has been utilised on all of Ian's customers' silage this year, with farmers who were at first hesitant about its use, becoming increasingly enthusiastic as they saw the immediate effect the implement brings to the ensiling process.

Ian's clamp operator Tony Davies admits he was sceptical as to its benefits when the SilaPactor was first introduced, but now he wouldn't want to leave the yard without it. The SilaPactor is mounted on the back of a JD 7530 buck rake tractor and provides a much greater intensity of rolling evenly across the clamp, producing a safer, more secure surface particularly close to the clamp edges. With different farmers requesting different approaches to how their clamp is filled, be it short and steep or long and gradual, the SilaPactor has coped well with 1st and 2nd cut silage. Tony will be tackling whole crop and maize as the season progresses.

One thing Ian is sure about is that it doesn't matter how progressive his harvesting approach is, the clamp maker is king of the silage operation, dictating the speed of the harvest so that each load of forage can be spread and rolled evenly before the next load is tackled. Ian's firm belief is that good silage is made in the clamp, as is his harvesting reputation!

Diary Dates 2012

Meet the team at the following shows:

South West Dairy Event • 3rd October
The Royal Bath & West Showground,
Shepton Mallet, Somerset, **BA4 6QN**

Borderway Agri Expo • 2nd November
Borderway Mart, Rosehill, Carlisle,
Cumbria, **CA1 2RS**

Beef South West • 8th November
Westpoint Arena & Exhibition Centre
Clyst St Mary, Exeter, Devon, **EX5 1DH**

Agriscot • 21st November
Royal Highland Centre, Ingliston,
Edinburgh, **EH28 8NB**

Royal Welsh Winter Fair
26th - 27th November
Llanelwedd, Builth Wells,
Powys, **LD2 3SY**

Royal Highland Winter Fair
28th November
Royal Highland Centre, Ingliston,
Edinburgh, **EH28 8NF**

The Sales Team

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Proven equipment for the **best** crimped feeds

Wile 55 Special Moisture Meter

Exclusive to Kelvin Cave Ltd. this version of the well proven Wile 55 moisture meter has been improved and modified by the manufacturer to give accurate grain moisture readings up to 50% moisture. This makes it a vital tool for farmers and contractors who want to ensure that the correct amounts of Crimpstore and Propcorn NC are applied for effective preservation across the full moisture range.

The robust construction and rugged carrying case are designed to make this essential tool safe in the farm work environment.

Supplied with full, easy-to-follow instructions, the Wile 55 Special couldn't be more straightforward to use.

No messy grinding of samples is required, so multiple samples from the combine tank or grain heap can be tested quickly and cleanly, giving a good representation of the predominant moisture content of a bulk load of grain.

Murska and Korte Crimpers

- The best for crimping, dry rolling and bagging
- The best at processing cereals and pulses at all moistures
- The best range for processing 5 tonnes/hour to 40 tonnes/hour
- **The best return on your investment**

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