









## Your opportunity

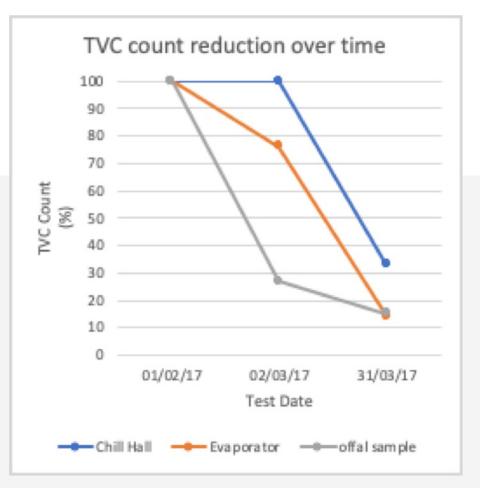
# Upgrading storage sanitation, improves kg to market and operational costs.

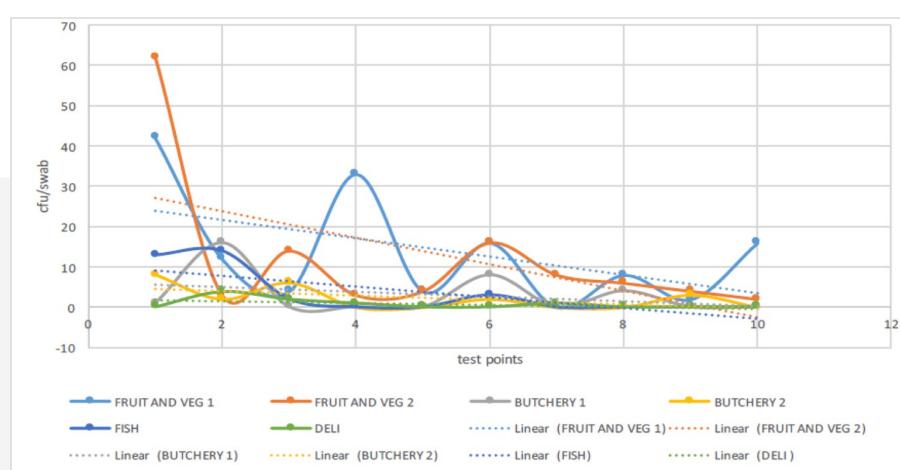
#### When meat safety improves:

- Less microbial cross contamination reduces the amount of trim loss by at least 1% to 5%.
- Reducing the TVC counts at the beginning improves shelf life at the end by up to 3 days supports your brand/relationships.
- Biofouling is reduced which improves mechanical cooling performance. Up to 79% in air handling efficiency.
- Extend asset life storage becomes fresher, cleaner and more energy efficient. Fewer repairs and downtime.
- Added layer of protection again human behaviour or mechanical issues.
- Reduced cleaning requirements and reliance on staff.



## Selection of global clients at different stages of the supply chain







Results were taken and sent to an independent pharmaceutical laboratory on the dates shown in the graph.

TVC counts were shown to have a 60% reduction after the testing took place compared to before testing.

The air sample and each of the data points are signed off by their section head of microbiology.

#### **South African Butchery – Hyper market saves Rand**

Reduced waste from across the board by reducing microbial cross contamination.

Overall average monthly saving of 25% or R138,145. (Largest was fresh produce)

Butchery was R11,652 - an improvement in what was considered to be very hygienic environment.





Family owned and operated, ChillSafe has a long history with Drakes Supermarkets.

Used extensively throughout the entire operations cool rooms, the butcheries and deli sections won't report commercial in confidence waste reductions.

But their spend on ChillSafe is in excess of R3,100,000 p.a. making it an integral part of operations each month for the past 4 years.



# Australian food manufacturing – Vili's premium beef pies

Famous as suppliers to the Sydney Olympics, Vili's is a world-class bakery with the highest standards for food safety and operations.

ChillSafe has worked with Vili's for 5 years, and has been recommended downstream in their supply chain to ensure ingredients are treated with ChillSafe.

#### How does it work?

ChillSafe's ULD-HPV offers ongoing protection against spoilage, microbial cross-contamination, and biofouling.

It enhances and preserves air and space, to protect meat quality.



Reduce biofouling, spores and cross-contamination

**Increase asset efficiency** 





Reduce mould, bacteria and visible biofouling

**Increase hygiene** 



Protection with always on/always active vapour

Increase kg to market



FDCs enhance operational efficiency, require significantly less cleaning, and boost cooling effectiveness, further minimising microbial cross-contamination

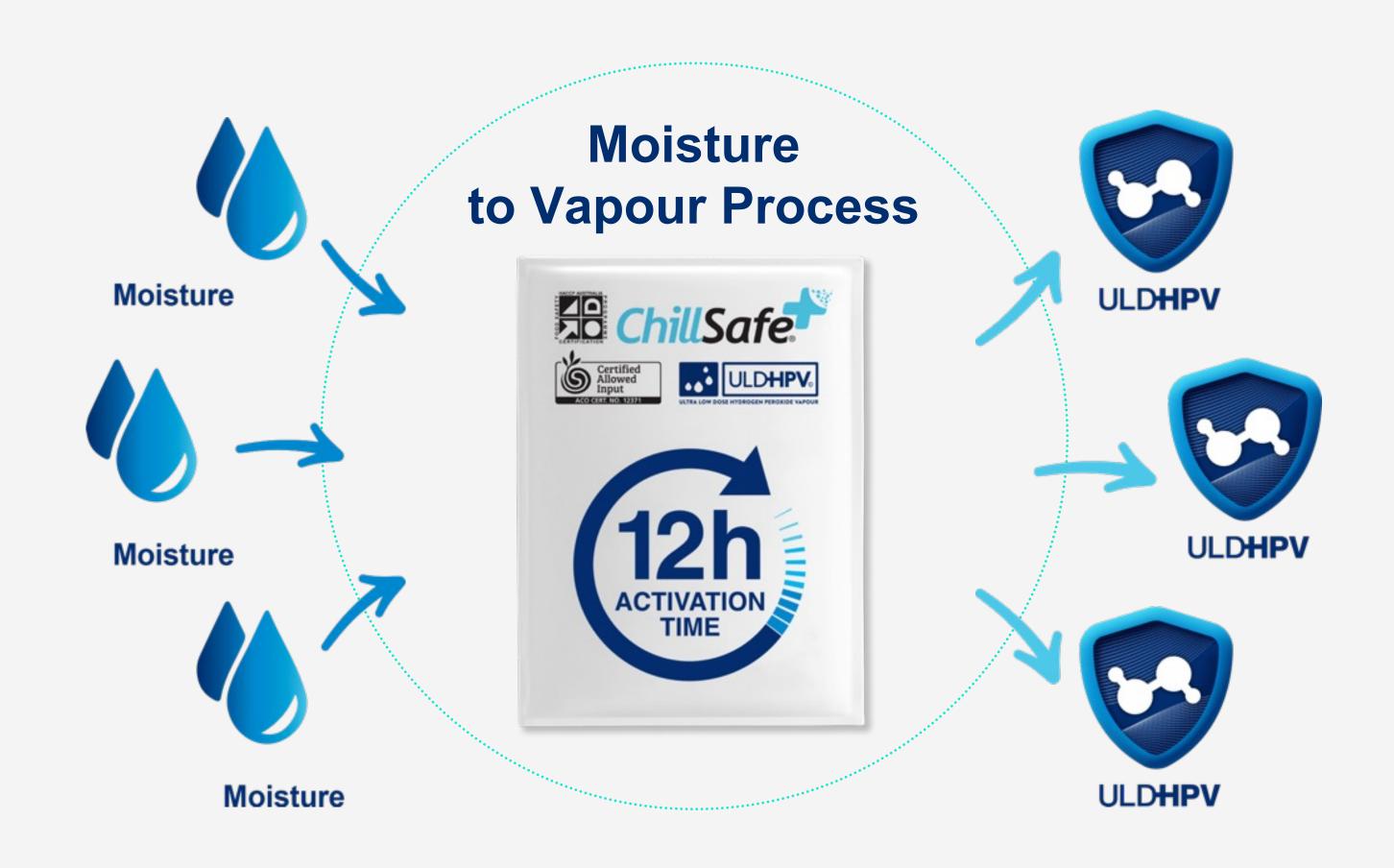


Ultra Low Dose Hydrogen Peroxide Vapour

See the ChillSafe tech deck for further information!

## How ChillSafe works – moisture to vapour process

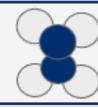
Each sachet absorbs moisture from the air, creating a small reservoir of Hydrogen Peroxide, which evaporates out as an Ultra Low Dose Vapour <0.05 ppm



## Or in short, creates and maintains an exceptionally hostile environment for bugs

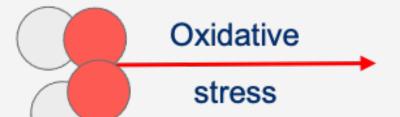


Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>)



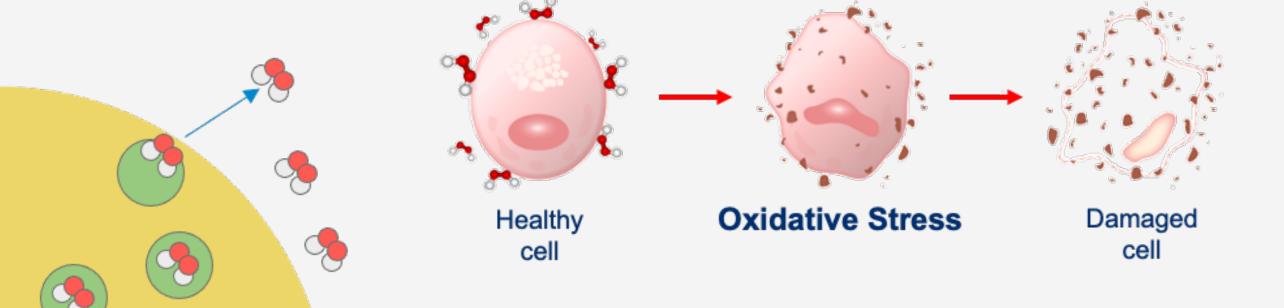
Volatile Organic Compounds (Ethylene & Odours)

#### Reduces Biofouling

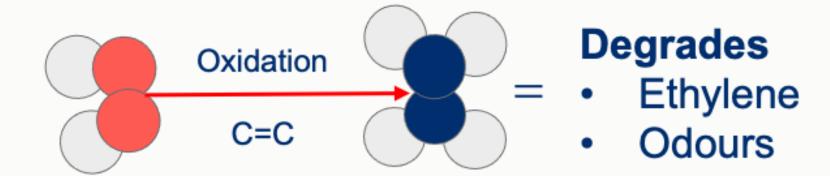


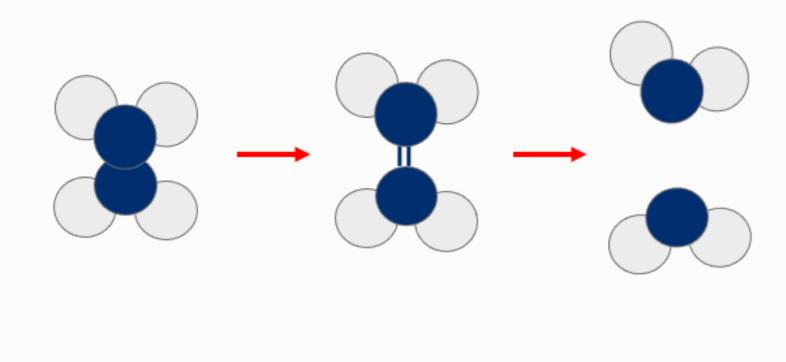
#### Reduced cell and spore viability by damaging

- Proteins
- Cell membrane
- DNA
- Enzymes
- Lipids
- Polysaccharides
- EPS



#### **Volatile Organic Compounds**





## Where does it work?







Chilled and contained storage			
Installation	Continuous operation, install permanently.		
C50	Racking system, up to 5 trays per magnet.		
Location	Place racking system close to the FDC and away from doors.		

Shipping Container					
Installation	Prior to loading.				
Size	20ft	40ft			
C50	2	4			
Location	Place sachet close to the FDC using the adhesive strip on the back of the sachet.				

Refrigerated transport				
Installation	Continuous operation, install permanently.			
Size	50m <sup>3</sup>			
C50	1			
Location	Place sachet close to the FDC using the adhesive strip on the back of the sachet or a racking system.			

## What to expect and when

Legend

**Day 2-30 Day 30+ Day 0-7 Active Defence Activation & Continuous preventative control** Conditioning & biofouling defence **Month 1** Month 2 Month 3 Month 6 Month 12 Month 9 Reduced odour and ethylene Reduced microbial counts (TPC/TVC/CFU) Reduced produce and food spoilage, improved shelf-life Reduced visible mould, reduced spore viability (SARDI) **Increased FDC fan speed Perishables** Reduced energy consumption **Optimal value & volume period** Improved temperature control Reduced biofouling (air handling) BioFinder

Andrews are the Reduced microbial contamination та в теления снязателия \* Catalase positive microorganisms Microbial/VOC detected on surfaces\*

using Biofinder

**Operational** 

Microbial

# The ChillSafe System – easy to deploy



Sachet	C50	
Treatment space (m <sup>3</sup> )	50	
Treatment time/sachet	30 days	
Installation methods	Hook & Tray system	
mstaliation methods	Self adhesive backing tape (on sachet)	
Packaging	100 sachets/box	
Packaging	10 bags x 10 sachets	
Disposal	Tyvek is 100% recyclable Other ingredients in general waste	







Racking	Hook	Tray	
Snaplock system	Corrosion resistant magnetic spigot	Plastic sachet holder	
Capacity	Daisy chain 5 trays & sachets per magnet	One sachet per tray	
Plastic parts	Food grade polyethylene with anti microbial additive		
Performance	Increases airflow		

## The guarantee



When used as directed, ChillSafe works to generate minimum of 4:1 ROI and offer new peace of mind.

- Confined and chilled spaces
- Continuous use
- For poor areas, activate first, then clean to make cleaning easier and safer with less microbial activity
- Swap out every 30 days
- See, smell and feel the difference
- After 30 days, you will notice changes in the air, on surfaces and less malodours
- If after 90 days you experience no changes in reduced waste, you get your money back

