

# Chlorine Free Journey and Progress to date

## *Milk Quality Ireland*



*William Ryan  
Dairygold Milk Quality Advisor*

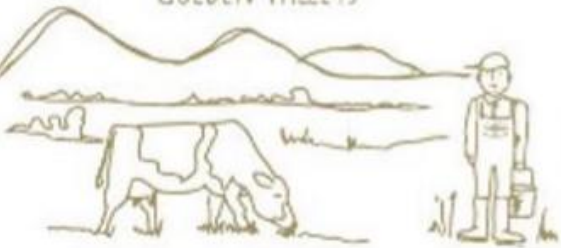


# Supporting Our Milk Suppliers go Chlorine Free



**FARM**

GOLDEN VALLEYS



**FACTORY**

PLANT



# Introduction



- Dairygold customer base required the removal of chlorine-based products from January 1<sup>st</sup> 2021.
  - Concern regarding presence of chlorates in milk powder.
  - Affect iodine metabolism in infants.
- Dairygold testing all milk suppliers for TCM and Chlorate.
- **Chlorates** are produced by the degradation of sanitising agents such as Chlorine, Chlorine dioxide or Hypochlorite.
  - Limit 0.00375 mg / kg
- **TCM** is formed when chlorine in the detergent / sterilizer comes in contact with the fat in the milk or other organic matter.
  - Limit 0.00124 mg / kg



# How Dairygold Supports Chlorine Free Journey



Milk Advisory Team



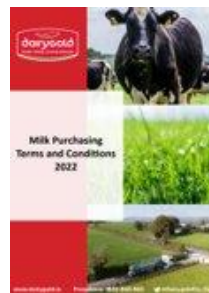
Solar and Generator



Technology



Supplier Open Days



Communications



Financial Funding Support



## THE MOVE TO **CHLORINE-FREE** ...We've got it covered



Dairy detergents containing chlorine are not permitted to be used for bulk tank or milking machine wash routines from 1<sup>st</sup> July 2020.

- Chlorine-Free Detergents
- Hot Water Solutions
- Expert Advice

Everything you need to make the change on July 1<sup>st</sup> is available from your local Co-Op Superstores

# How Dairygold Supports Chlorine Free Journey



## Chlorine-Free Dairy Hygiene

Product Name	Liquid/Powder	Available Sizes	Usage Rate	
			COLD	HOT
GOLD ASSURE UNIVERSAL CP	Liquid	20L/200L	450ml/45L	300ml/45L @ 70°C
CIRCODINE CP	Powder	10 kg/20 Kg	223g/45L	180g/45L @ 60°C
AVAN KSAN CP	Liquid	25L/205L/1500L	400ml/45L	350ml/45 L @ 70-75°C
DEOSAN OSA-11	Liquid	20L/200L	280ml/40L	260ml/40L @ 70-80°C
DEOSAN LIQUID CP	Liquid	20L	300ml/40L	200ml/40L @ 70-80°C

Minimise the risk of chlorates & residues in your milk

LOOK OUT FOR THE CHLORINE-FREE STICKER



OUR RANGE OF CHLORINE-FREE DAIRY DETERGENTS HAVE BEEN APPROVED BY TEAGASC & OUR MILK ADVISORY TEAM. (AVAILABLE IN A VARIETY OF SIZES)



Shop now at your local Co-Op Superstores or online @ [www.coopsuperstores.ie](http://www.coopsuperstores.ie) for delivery direct to your farm



## HOT WATER SOLUTIONS

for your Chlorine-Free Wash Programme

CHOOSE FROM: ELECTRIC • HEAT RECOVERY • GAS • DIESEL • SOLAR\*

### Hot Water is Critical

- For the main detergent wash in the milking machine a minimum of 9 litres of hot water (75 – 80 °C) is required per unit with at least the first litre dumped prior to circulation to warm up the milking machine plant.
- Ask your bulk tank manufacturer/technician for the required hot water volume for the bulk tank. Factory setting is 1% of the capacity of the tank per wash cycle.
- Follow detergent usage rates for both the milking machine and bulk tank.

Contact your bulk tank manufacturer for hot water heat recovery options.

\*Solar options available in 2020

Do you treat your well water with chlorine? Pick up a carbon filter at your local Co-Op Superstores

- Instant & continuous hot water up to 80°C
- Flowrate up to 30 litres per minute
- Easy installation and service

ELIGIBLE FOR TAMS

CALOR

- Instant & continuous hot water at 85°C
- Flowrate up to 375 litres per minute
- Suitable for LPG gas supplies
- BioLPG available
- Installation on farm within 28 days
- Suitable for all dairy wash systems
- Free on farm site survey and water test

ELIGIBLE FOR TAMS

atlantic

- Instant hot water
- Easy to install
- Heats to 82°C
- Connected to water mains
- Protected against corrosion
- Works from single phase electricity supply
- Available in 100L, 150L, 200L & 300L

FROM €399



Shop now at your local Co-Op Superstores or online @ [www.coopsuperstores.ie](http://www.coopsuperstores.ie) for delivery direct to your farm



 **LeanForm** Ideas of the month

Getting the basics right first time, every time!

**1. Check Milk Liners**  
With over 4 months milk supply complete on most herds now is the time to do up a milk liner and short pulse tube calculation.  
*Rule of Thumb: Number of milking units X Number of milking rows per day / 2000.*



**2. Purchasing Detergent**  
Purchase Chlorine Free (CF) detergents only as you need them. Avoid stock piling. Store in dark cool place off the ground surface.



**3. Measure!!**  
You cannot manage what you don't measure. 25 Litre drum pump or plastic measuring jugs are useful management tools for washing routine.



**Leanfarm - Saving time, effort and money**

 **LeanForm** Ideas of the month 

**Graduated Tube to measure Detergent Use**

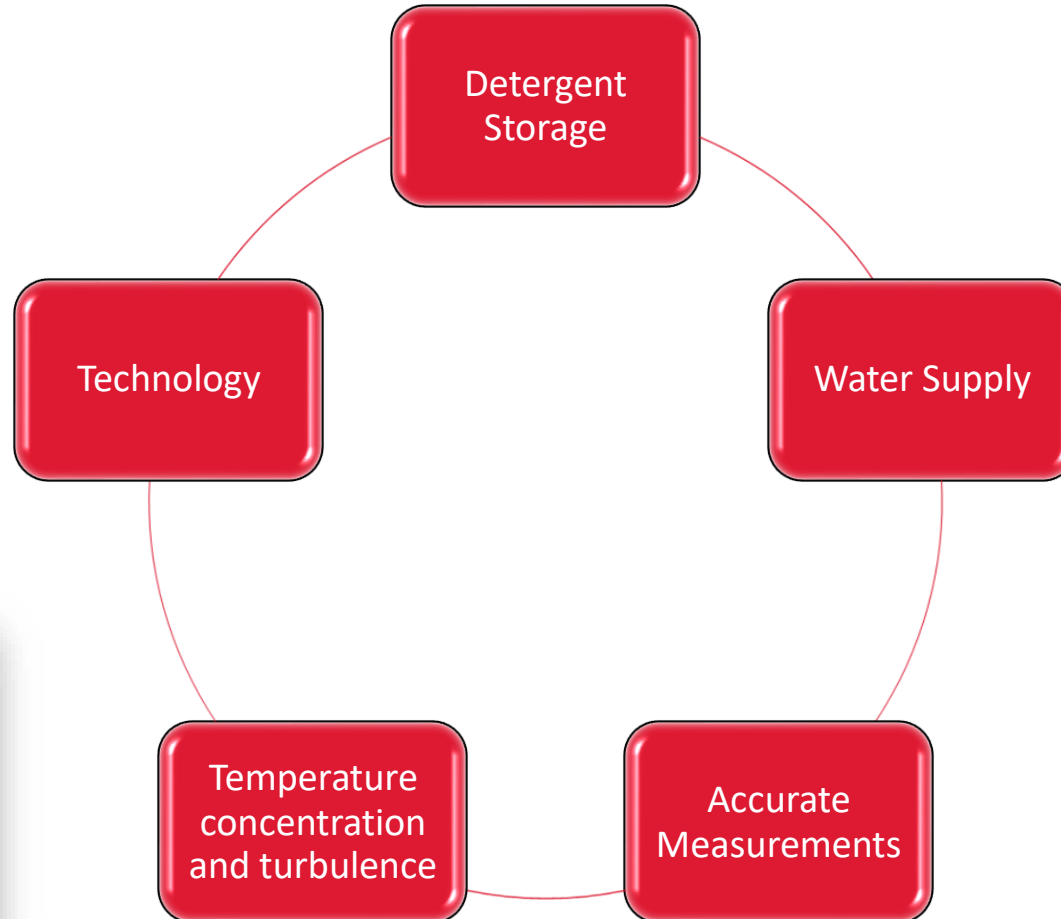
- ✓ Easy to detect that target millimeters are used daily.
- ✓ Fix any problem now and not later.
- ✓ **Further Advice to note:**
  - ✓ Monitor water volume and target temperature of wash.
  - ✓ Regular machine and tank service.
- ✓ Use Teagasc Approved Chlorine Free (CF) products.



Photo shows 200 Litre barrel with graduated tube measure.  
*"This lean tool means I can prevent a milk quality problem becoming an issue."*  
– Tom Walsh, Kildorrery, Co. Cork.

**Leanfarm - Saving time, effort and money**

# Factors for consideration



Milk suppliers are recommended to use only non chlorine detergents and teat disinfectants as per Teagasc Recommended List ([www.teagasc.ie](http://www.teagasc.ie))



Chlorine Free  
“We are all in this together”

Thank You