Mastitis control in and after wet conditions

Using teat sealants in your herd

Teat sealants are used in cows at the time of drying-off to help protect them from environmental mastitis infections during the dry period and prior to calving. They are infused into the teats after the last milking and stay in the lower part of the teats throughout the dry period, physically preventing bacteria from entering the teat canal. Teat sealants are not antibiotics but they can cause black spot blemishes in maturing cheese. This is not a human health problem but can result in export customers rejecting or downgrading product.

To maintain Australia’s reputation for high quality dairy products it is essential that milk leaving the farm does NOT contain teat sealant.

The 3 key steps for the proper use of teat sealants:

**Step 1 Administer teat sealants correctly**

The techniques required are very different to those used with antibiotic Dry Cow Treatment. It’s important that you and your staff know how to administer the product correctly.

**Administer teat sealants LAST**

If a cow is to receive antibiotic Dry Cow Treatment in conjunction with teat sealant, make sure that the teat sealant is the final product administered.

**Keep the tubes sterile**

Cold temperatures can make the product hard to instil into the teat. Do not warm tubes by putting them directly into warm water. Instead, place the tubes in a warm room prior to use or put the product container into a larger bucket containing hot water (i.e. a bucket in a bucket).

For more information visit the Countdown Farm Guidelines at www.dairyaustralia.com.au
Completely disinfect the teat ends
Wearing gloves, disinfect by rubbing the teat opening with a teat wipe or cotton ball and alcohol (70% methylated spirits & 30% water). Repeat until no dirty colour is evident on the wipe.

Gently close off the top of the teat and insert the tube nozzle
To encourage the product to remain within the teat cistern and canal (rather than in the udder) gently squeeze close the top of the teat (closest to the udder). Remove the tube cap (without touching the tip), gently insert the nozzle into the teat canal and infuse the product. Do not insert the nozzle to its full depth – this can damage the teat end.

DO NOT massage the udder after infusing teat sealant
Unlike antibiotic treatments, the infused product must sit in the lower part of the teat.

Step 2 Remove teat sealants from fresh cows

It is very important to stop teat sealant entering the vat from fresh cows.
This can be time consuming especially if you have large batches of cows calving, so make sure you have enough staff available.

At the first milking strip each treated quarter at least 10-12 times
This removes the bulk of the teat sealant so that it does not come in contact with the milk lines or rubberware – remember to wear gloves! This step is necessary even if calves have sucked prior to the first milking.

Keep milk from fresh cows out of the vat for at least 8-10 milkings after calving
Small amounts of residual teat sealant will still be present in the milk for the first few days after calving, so it is important that all cows have a minimum period of 8 milkings (10 milkings for induced cows) before milk is included for pickup. This is also the standard Countdown recommendation to minimise colostrum in the milk for sale.

Preferably use designated clusters and test buckets
Teat sealants adhere to milk lines and rubberware. Where possible avoid running milk from treated animals through normal milk lines during the first eight milkings.

Step 3 Clean milking equipment carefully

Residual teat sealant can stick to and form clumps (seen as a greasy white substance) in areas of reduced milk flow, such as milk claws and plate coolers.

Carefully clean milking plant to ensure that every effort has been made to prevent residual product from entering the bulk vat.

Review the cleaning routine in your shed and update milking staff
Take extra care to follow label directions on the cleaning products used. Ensure that the water temperate, chemical concentration, and volume used is according to label directions.

Change filter socks regularly
Effective filters are crucial to limiting the amount of residual teat sealant entering the bulk vat. Change filter socks regularly, especially if there is visible teat sealant present and leave filters in place during the cleaning phase to stop any product coming in contact with the plate cooler.