



A Global Organization for Mastitis Control and Milk Quality

Proper Storage & Handling of Teat Disinfectants

Like most cleaning and disinfecting products used on the dairy farm, teat disinfectants (commonly referred to as “teat dips” which could include dip, spray or foam application) are chemical products. And, as with all chemicals, knowledge of the product being used is essential for achieving the desired end results.

Before purchasing and using a teat dip, gather as much information as possible about the product. Information that can be gathered beforehand could prevent problems down the road. Save all printed material and keep available for future reference.

The following are sources of information about teat dips:

- Summary of Peer-Reviewed Publications on Efficacy of Premilking and Postmilking Teat Disinfectants Published Since 1980 (published by NMC) website: <http://www.nmconline.org/>
- Product literature
- Product label
- Product material safety data sheets (MSDS)
- Product sales representative
- References from other farms using the teat dip
- Milk quality websites

Once this information is gathered, the consumer should know the following information:

- Active ingredient
- Concentration of active ingredient
- Effectiveness of teat dip against mastitis pathogens
- Contact time required for the active ingredient to be effective
- Emollient(s)
- Emollient level
- Is it classified as a Barrier or Non-Barrier teat dip?
- Is it a Seasonal or Non-Seasonal teat dip?
- Proper use
 - Dip, spray, foam
 - Ready-to-use or requiring dilution
 - Pre-dip, post-dip or both
- Compatibility with other teat dip ingredients (for example, when the pre-dip and post-dip have different active ingredients, check with the manufacturer to make sure they will not cause any adverse reactions)
- First aid and emergency phone number
- Proper storage and handling procedures
- Potential hazards from misuse

Once the decision has been made to use a particular dip and it is brought on the farm for use, train all the parties involved who will be using the teat dip. Include written step-by-step instructions, which may need to be in the language native to the handlers. The first and most important step is **read the label**. Make certain that the product that was researched is the product you are about to use.

The next step is to make sure the teat dip maintains its integrity from the container to the cow. The following storage and handling guidelines will help ensure the quality and efficacy of the teat dip. In addition, be sure to follow all label directions.

Storage

- Store in a cool, dry area away from direct sunlight and heat sources.
- Do not allow the teat dip to freeze.
- Keep containers and dispensers closed between dispensing to prevent contamination.
- Store teat dips away from other chemicals and with the label displayed to eliminate confusion with other chemical products.
- Rotate inventory, using the older product first.
- **Keep out of reach from children.** Use child safety locks on pumps and spigots/faucets. Store dispensers and transfer containers away from children.

Handling

- Do not use any teat disinfectant products after the expiration date.
- Exercise care when removing bungs and caps. Some teat dips could form gasses that build pressure over time.
- Replace bungs and caps when not dispensing product.
- Use caution not to contaminate pumps or spigots/faucets when switching from a teat dip container that has already been in use, to a new teat dip container.
- Drum pumps and spigots should be cleaned and disinfected on a routine basis to prevent possible bacterial build-up.
- Do not use drum pumps or spigots/faucets that were used to transfer other chemicals.
- Use dedicated pumping equipment for like-based teat dips. For example, do not use a pump used for an iodine-based teat dip, to transfer a non-iodine based teat dip.
- Exercise caution if transferring teat dip from a larger container to a smaller container for use in the parlor or barn.
 - Make sure the container is clean and free from previously held product.
 - Place the teat dip in properly marked "teat dip" container.
 - Replace old and leaking containers.
- All teat dip containers used in the parlor, barn and in storage should be capped between use.
- Clean and disinfect the inside and outside of containers on a routine basis.
- Discard leftover teat dip in teat dip cups immediately after milking and do not return to storage or transfer containers.
- Clean and disinfect teat dip cups after each milking, or if they become contaminated during milking.
- Do not dilute ready-to-use products with water or other chemicals.
- Do not add emollients to teat dip unless there are specific instructions from the manufacturer.
- If the solution in the teat dip cup becomes dirty and/or loses color, discard remaining contents, wash and sanitize the cup, and refill.
- Use teat dip applicators that are constructed of plastic or non-corrosive materials.
- Keep teat spray systems clean and free from contamination.
 - Do not let sprayers come in contact with the floor.
 - When washing down floors, walls, parlor equipment, etc., use caution not to let washing residue come in contact with sprayers.
 - Wash sprayers last, in case parlor wash residue comes in contact with spray units.
- Teat spray systems should be cultured every six months for pathogens.
- Teat spray systems should have the plastic tubing replaced every two years.
- When mixing teat dip concentrates, the water source should be checked by a qualified lab for bacterial and mineral content to ensure the ready-to-use dip will be effective when made.
- When mixing concentrates, care must be taken not to contaminate the ready-to-use teat dip.
 - Use clean mixing equipment.
 - Use clean filling equipment, pumps and spigots/faucets for transferring the teat dip from the mixing vessel to the storage container.
 - Do not fill dirty and unmarked containers.

There are numerous ways that teat dips can become contaminated if proper storage and handling guidelines are not followed. Procedures for handling teat dips on the farm should be reviewed on a regular basis to ensure that the cows are always being dipped with a product that is free of contaminated materials and is the most effective teat disinfectant possible.

The information in this factsheet represents the state of knowledge at the time it was written (December 2009).

The NMC is a not-for-profit educational organization that provides a forum for global exchange of information about milk quality, mastitis, and relevant research. The NMC strives to communicate that information to all segments of the dairy industry. For additional information contact:

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