USING WASH WATER SANITIZERS SAFELY:
KEEP YOURSELF AND WORKERS SAFE!!

Adding a sanitizer to water in dunk tanks can reduce the chance of cross-contamination. The sanitizer should be added to the first rinse, and monitored for efficacy. Follow labeled instructions.

PAA-BASED SANITIZERS: Sanidate 5.0, VigorOx 15 F&V and Tsunami 100 are some of the sanitizers that are used to reduce pathogens on contact surfaces and in rinse water in produce packsheds. They are made from different formulations of hydrogen peroxide, peroxyacetic acid (PAA) and acetic acid. PAA-based sanitizers break down into water and oxygen, but in their highly concentrated commercial forms need to be handled carefully to avoid harm to humans and property. In their concentrated forms, they are strong OXIDIZING AGENTS and are HIGHLY CORROSIVE and will react with other chemicals. Due to their corrosive nature, they can cause irreversible eye damage, and are harmful if swallowed, inhaled or absorbed through the skin. **Do not get them in your eyes, skin or clothing!**

**BLEACH OR CHLORINE BLEACH** is the common name for liquid sodium hypochlorite. Bleach is also corrosive, although not quite as corrosive as the PAA-based sanitizers in its concentrated form. Bleach should be handled with the same safety precautions as the PAA-based sanitizers discussed on this sheet.

TRAIN ALL WORKERS IN SAFE HANDLING AND USE OF SANITIZERS!!

- Wear clean safety goggles or glasses
- Wear gloves
- Long sleeves and long pants (or an apron) and closed-toe shoes
- Only store, mix & use in well-ventilated areas!
- **NEVER** mix PAA or bleach with other disinfectants, bleaches or chemicals.
- Clearly label containers so it is not mixed with other chemicals by accident.

SAFE DISPENSING

To avoid splashing, never pour the liquid straight from a large container of concentrated sanitizer. Instead, use a dispenser. UVM Extension’s Agricultural Engineer has designed a simple doser that is just a homemade burette for manually measuring accurate doses of sanitizer into wash water solutions.

The process of mixing a treatment dose of sanitizer requires metering a specific dose of concentrate into a larger volume of water. Here is a calculator to help you determine the appropriate amount of sanitizer for different sized dunk tanks/sinks.

Dosers like those below can be purchased from the product distributor, or if not, call the manufacturer. The ones pictured here are available through [http://www.enviroselects.com/](http://www.enviroselects.com/)

- Self-venting spigot: $8.00 through Biosafe vendors.
- Dispenser for 5 gallon containers of Biosafe products $75 through Enviroselects
FIRST AID FOR PAA-BASED SANITIZERS

Post numbers for local emergency centers in easy to find places. Following are general first aid steps for sanitizers. The product label should have first aid information for the specific sanitizer. You can also look up the “Material Safety Data Sheet” (MSDS) for the specific product.

The general first aid for PAA-based sanitizers is:

In eyes: Hold eye open and rinse gently under water for 15-20 minutes. If present, remove contact lenses after first 5 minutes, then continue rinsing. Call poison control center or doctor for treatment advice.

On skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call poison control center or doctor for treatment advice.

If inhaled: Move person to fresh air, if person not breathing call 911 or ambulance, then give artificial respiration. Call poison control center or doctor for treatment advice.

If swallowed: Call poison control center or doctor immediately. Have person sip water if able to swallow. Do not induce vomiting unless told to do so by poison control center or doctor. On arrival at hospital, tell doctor the person has probably mucosal damage.

SAFE STORAGE AND LABELING

PAA is an oxidizer and will with react with all other chemicals: acids, bases and hypochlorites (bleach). As soon as you receive the PAA, be sure to vent the container it is in or else pressure will build up, bursting the container. If needed, vented caps can be purchased here: http://www.porex.com/products/packaging/cap-closure-vents/

To protect people and floors from spills, containers should be kept inside a tub made of HDPE (high density polyethylene). these can be purchased at most hardware or home supply stores. (Do NOT cover the tub – PAA should always be well-ventilated)

Label outside of the container with safety and hazard information:
- ALWAYS store in well-ventilated area
- NEVER store near or mix with other chemicals
- Store in plastic only: Do not store in wood or metal

DISPOSAL

Concentrated PAA-based sanitizers can corrode metal pipes and is toxic to aquatic organisms. Make sure that when disposing, it is always diluted to the appropriate ppm listed on the label and do not pour the concentrated form down metal pipes or into surface water.

Brand Name Disclaimer

Any reference to commercial products, trade names, or brand names is for information only, and no endorsement or approval is intended.


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