

# USING SANITIZERS IN PACKSHEDS SAFELY: KEEP YOURSELF AND WORKERS SAFE!!

**Peroxyacetic Acid (PAA)** is essentially hydrogen peroxide and acetic acid. It breaks down into water and oxygen, but in its commercial form is highly concentrated, very corrosive and needs to be handled carefully to avoid harm to humans and property. There are a number of PAA brands on the market, **Sanidate** is most commonly used in Vermont. In its concentrated form, PAA is VERY corrosive and will burn eyes, nose hairs, skin and clothes. If it gets into your eyes you can be blinded.

**Chlorine** is the common name for liquid sodium hypochlorite. Chlorine is also corrosive, although not quite as corrosive as PAA in its concentrated form. It should be handled in the same ways as PAA.

## TRAIN ALL WORKERS IN SAFE HANDLING AND USE OF PAA AND CHLORINE!!

- Wear clean safety goggles or glasses
- Chemical resistant gloves, such as neoprene gloves (can be worn over nitrile gloves to avoid contact with any PAA on neoprene gloves)
- Long sleeves and long pants (or an apron) and closed toe shoes
- Only handle in well-ventilated areas!
- **NEVER** mix PAA or chlorine with other disinfectants, bleaches or other chemicals. Train workers in how to use PAA and clearly label containers so it is not mixed with other chemicals by accident.

## SAFE DISPENSING

To avoid splashing, never pour or dispense the liquid straight from a heavy container. Instead, use a dispenser (these can usually be purchased from the distributor, if not, call the manufacturer).



The least expensive option is a simple self-venting spigot, available for \$8.00 through Biosafe vendors.



The more expensive dispensers are "Goat throats" available for Biosafe products. This is a pump dispenser for 30 and 55 gallon containers. The price is \$273, plus \$40 for an adapter to use it on a 2.5 gallon container.

## SAFE STORAGE AND LABELING

PAA is an oxidizer and will 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, the container should be kept inside a tub made of HDPE (high density polyethelene) these can be purchased at most hardware or home supply stores. (Do NOT cover the tub – PAA should always be well-ventilated)



Label the 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



Large containers can be placed on containment pallets (available through ULINE or Grainger)

## **FIRST AID**

You should always have emergency numbers for local emergency centers posted and easy to find on the farm. The product label should have first aid information for the specific product. You can also look up the "Material Safety Data Sheet" for the specific product. **The general first aid for PAA 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.

## **DISPOSAL**

Concentrated PAA can corrode metal pipes and is toxic to aquatic organisms. Make sure that when disposing of PAA it is always in the diluted form 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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