

# PERASAN® 'A' (Antimicrobial Solution)

EPA Number: 63838-1

## Applications

“Chlorine free antimicrobial solution concentrate”. It is used in the dairy, food and beverage processing industry for CIP pipeline cleaning, fogging, sanitizing, bottle, filler and tank sanitizing, and for general disinfection. It is also used for continuous conveyor sanitizing and Listeria intervention programs in meat and poultry plants, and in the treatment of cooling water, process and wastewater. Also, primary uses are for slime and biofouling control, sulfite and odor reduction, and for cleaning UF and RO membranes. Peroxyacetic acid solutions are also used for disinfection in human and veterinary applications including hospitals. Use dilution for equipment sanitation is **1 oz - 2 oz per 5 gal.** of water. Use dilution for *disinfection* for various organisms is 1.5 oz. per 5 gal of water. A potable water rinse is not necessary if used at less than 2.0 oz/5 gal (200 ppm active PAA).

## Properties

PERASAN® 'A' has a high oxidation potential and is very reactive. It exhibits excellent bactericidal and fungicidal activity against a wide range of microorganisms in cold or warm water. Product is stable for a minimum of 1 year under normal conditions. Degrades to oxygen, water, and carbon.

## Chemical Composition

PERASAN® 'A' is an equilibrium mixture of peracetic acid, hydrogen peroxide, acetic acid, proprietary ingredients, and water.

|                                       |           |
|---------------------------------------|-----------|
| Peracetic acid (% wt.)                | 5.6-6.0   |
| H <sub>2</sub> O <sub>2</sub> (% wt.) | 26.5-27.2 |
| Acetic acid (% wt.)                   | 7-8       |
| Stabilizer (% wt)                     | <0.4      |

  

|                                    |            |
|------------------------------------|------------|
| Density 20°C (68°F), (g/ml)        | 1.12       |
| Vapor Pressure 20°C (68°F), (mbar) | 27         |
| pH (10% solution, 20°C (68 °F)     | <2         |
| Flash Point °C (°F) DIN 51584      | >98° (207) |
| Freezing Point °C (°F)             | -5(-2)     |

## Physical Properties

## Appearance

Clear, colorless liquid (pungent vinegar-like odor)

## Storage

**The PERASAN® 'A' container must be stored in an upright position.** The storage area should be well ventilated and **shaded from sunlight** as well as protected from sources of radiant heat. Contamination of the product, especially heavy metal ions and alkali, must be avoided.

## Shelf Life

At least one year without notable losses of active oxygen if stored properly.

## Packaging

53.5 gal (500 lb) plastic pails and drums.

## Transport (DOT)

Hydrogen Peroxide and Peroxyacetic Acid Solution, stabilized, 5.1, UN 3149, PG.II (corrosive)

ENVIRO TECH CHEMICAL SERVICES, Inc. 500 Winmoore, Modesto, CA 95358 209-581-9576

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# MATERIAL SAFETY DATA SHEET

## PERASAN 'A'

EPA REGISTRATION #63838-1

ENVIRO TECH CHEMICAL SERVICES, Inc.

MSDS as of 6-12-04

### 1) PRODUCT AND COMPANY

**PRODUCT:** PERASAN 'A' Sanitizer and Disinfectant  
**SYNONYMS:** Peracetic Acid, Acetyl Hydroperoxide, Peroxyacetic Acid  
**REGISTRATIONS:** EPA Registration # 63838-1  
**MANUFACTURER:** Enviro Tech Chemical Services, Inc  
500 Winmoore Way, Modesto, CA 95358; 209-581-9576  
**TRANSPORTATION EMERGENCIES:** CHEMTREC (US) 800-424-9300

### 2) COMPOSITION AND HAZARDOUS INGREDIENTS:

| Chemical Name     | CAS #     | Wt%     | Exposure Limits         |
|-------------------|-----------|---------|-------------------------|
| Peroxyacetic Acid | 79-21-0   | 5.6-6%  |                         |
| Hydrogen Peroxide | 7722-84-1 | 26-28%  | 1 ppm (TWA); 1 ppm PEL  |
| Acetic Acid       | 64-19-7   | 7-8%    | 15 ppm STEL; 10 ppm PEL |
| Water             | 7732-18-5 | Balance |                         |

### 3) PHYSICAL DATA:

**ODOR:** Sharp, pungent, vinegar-like odor.  
**APPEARANCE:** Colorless liquid.  
**PH 10% SOLUTION:** <1  
**PERCENT VOLATILES:** 99%+  
**VAPOR PRESSURE:** 22 mm Hg @ 25° C  
**SOLUBILITY:** 100% in water  
**DENSITY:** 9.35 lbs/gal

### 4) FIRE HAZARD DATA:

**FLASH POINT:** 200° F (closed cup)  
**FLAMMABLE LIMITS:** N/A  
**AUTO IGNITION TEMP:** 270° C  
**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, foam.  
**POLYMERIZATION:** Will not occur.  
**FIREFIGHTING PROCEDURES:** Use flooding quantities of water only. Use water spray to keep all containers cool. Fight fire from protected or removed distance. Chemical type extinguishers are not very effective. Use proper personal protective equipment and positive pressure self-contained breathing apparatus.  
**STATIC DISCHARGE:** N/A  
**HAZARDOUS DECOMPOSITION:** Oxygen that supports combustion.

### 5) HEALTH HAZARD DATA:

#### a) FIRST AID:

**EYES:** Immediately flush with water for at least 15 minutes, lifting upper and lower eyelids intermittently. See a medical doctor immediately.

**SKIN:** Remove contaminated clothing and thoroughly wash with soap and water. If irritation occurs and persists, contact a physician.

**INGESTION:** Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. DO NOT induce vomiting. See medical doctor immediately.

**INHALATION:** Remove to fresh air. If breathing discomfort occurs and persists, see a medical doctor. If breathing has stopped, give artificial respiration. See medical doctor immediately.

**FIRST AID NOTES:** This product can be corrosive to skin, eyes, and mucous membranes. Consideration should be given to careful endoscopy as stomach or esophageal burns, perforations or strictures may occur. Careful gastric lavage with an endotracheal tube in place should be considered.

#### b) PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Use cup type chemical goggles or face shield.

RESPIRATORY: Use approved acid/gas cartridge or canister with full face piece unless breakthrough occurs, then use self contained breathing apparatus.

PROTECTIVE CLOTHING: Heavy rubber or vinyl gloves. Rubber boots, vinyl or rubber protective suit.

**6) REACTIVITY OR STABILITY DATA:**

**CONDITIONS TO AVOID:** Open flames, elevated temperatures, any source of heat, combustibles such as paper, wood, or leather. Temperatures above 86 F will degrade product, accelerate decomposition, and reduce shelf life.

**STABILITY:** Product is shelf-stable for up to 1 year when stored at room temperatures and not in direct sunlight.

**HAZARDOUS DECOMPOSITION:** Degrades giving off acetic acid and oxygen.

**INCOMPATIBLE MATERIALS:** Dirt, alkali (lye), organics, leather, paper, wood, and heavy metals.

**7) SPILL OR LEAK PROCEDURES:**

Always approach spills from upwind. Small spills may be flushed to an approved sewer line with generous amounts of water. For larger spills, dike well ahead of spill with non-reactive material such as sand. Spill may be neutralized with soda ash (sodium carbonate) broadcasted on surface. Use 0.7 to 1 lb. of soda ash for each gallon of spilled material. The resultant neutralized product will become carbon dioxide and water. Flush material with water and collect for disposal into plastic container. Dispose of in accordance with federal, state, or local laws. Combustible materials should be removed and/or rinsed with water to ensure all residual hydrogen peroxide is removed to the extent possible.

**8) HANDLING AND STORAGE:**

**HANDLING:** Store drums in upright position only. Empty drums as thoroughly as possible. Triple rinse before disposal. Never return product to original container.

**STORAGE:** Do not store near reducing agents, fuels, organic material, or other non-compatible materials. Store in a cool, dry, well ventilated area. Avoid temperatures above 86° F. **DO NOT STORE IN DIRECT SUNLIGHT**, or near sources of ignition or heat. Use first in, first out storage management. Containers must be vented.

**9) REGULATORY INFORMATION:**

DOT (Department of Transportation):

DOT MARKING: Hydrogen Peroxide and Peroxyacetic Acid Mixture, Stabilized,

HAZARD CLASS: 5.1 (oxidizer); UN/NA NUMBER: UN 3149

PACKING GROUP: II; SUBSIDIARY LABEL: 8 (corrosive)

SARA TITLE III SECTION 302: (40 CFR 355)

Listed: (acetic acid), Planning Threshold = 18,000 lbs (as is)

SECTION 302.4 REPORTABLE QUANTITIES (40 CFR 355)

Listed: (acetic acid), Planning Threshold = 18,000 lbs (as is)

SECTION 311 HAZARD CATEGORY (40 CFR 370)

Immediate Health Hazard (Acute)

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370)

Listed: (acetic acid), Planning Threshold = 18,000 lbs (as is)

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372)

Listed, Peracetic Acid 5%

CERCLA (40 CFR 302.4)

Listed (Acetic Acid), Category D; RQ = 89,000 lbs (as is)

CANADA: WHMIS

Hazard Class: Class D, Div. 2, Subdiv. B, Class E (Corrosive),

Class C (Oxidizer); Ingredient Disclosure List: Listed.

**10) RATINGS:**

HMIS (Hazardous Materials Identification System)

Health 3, Flammability 0, Reactivity 1, Protection H

NFPA (National Fire Protection Association)

Health 3, Flammability 0, Reactivity 1, Special OX

This MSDS is in accordance with OSHA Hazard Communication Standards.