MINNOCARE®
COLD STERILANT

For use in sanitizing of Reverse Osmosis Membranes and their associated distribution systems. Also for the sterilization and disinfection of hard surfaces and non-porous food contact surfaces.

**FIRST AID**

**IF INHALED**
- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

**IF ON SKIN OR CLOTHING**
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment.

**IF IN EYES**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after first 5 minutes, then continue rinsing.
- Call a poison control center or doctor for treatment advice.

**IF SWALLOWED**
- Call a poison control center or doctor immediately for treatment advice.
- Have a person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - PELIGRO**

**PRECAUTIONARY STATEMENTS**

**KEEP OUT OF REACH OF CHILDREN**

**DANGER - PELIGRO**

**HOT LINE NUMBER**

For chemical emergency, spill, leak, fire, exposure and accident, call Chemtrec, day or night (800) 424-9300, (703) 527-3887.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact Chemtrec at 1-800-424-9300 for emergency medical treatment information.

**Note to Physician:**

Probable mucosal damage may contraindicate the use of gastric lavage.

Failure to follow directions for use per package insert may result in user injury.

This product must be diluted with Purified Water prior to use.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage**

Store upright in shipping carton. Do not expose to direct sunlight. Maintain temperature below 75°F (24°C). Avoid contact with combustible materials. Avoid contamination from any source, including metals, dust, etc. Such contamination may cause rapid decomposition, generation of large quantities of oxygen gas and high pressures. Store in original closed container. NEVER TAMPER WITH VENT.

**Pesticide Disposal**

Wastes resulting from the use of this product may be disposed of on-site by dilution in a sanitary sewer or at an approved waste disposal facility. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for Guidance.

**Container Disposal**

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

**ACTIVE INGREDIENTS**

Hydrogen Peroxide .......... 22.0%
Peroxyacetic Acid ........... 4.5%

**INERT INGREDIENTS .......... 73.5%

Total ........................................ 100.0%

**NET CONTENTS:**

4 X 1 US QUART
(0.95 Liters)
Total = 4 US Quarts
(3.78 Liters)

**MANUFACTURED IN THE USA BY:**

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14605 28th Avenue North
Minneapolis, MN 55447 USA
Toll Free: +1.800.444.4729

www.medivators.com

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READ THE MINNOCARE® COLD STERILANT label and application notes before using this product. See Directions for use for additional precautionary statements. Failure to follow directions for use per package insert may result in user injury. This product must be diluted with Purified Water prior to use.

MINNOCARE® is a registered trademark of Medivators Inc.
**PRECAUTIONARY STATEMENTS**

Hazards to Humans and Domestic Animals.

**DANGER - PELIGRO**

Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. Do not get in eyes, on skin, or on clothing. Avoid contact with skin. Prolonged or frequent repeated skin contact may cause an allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash hands before reuse. Caution should be used when applying indoors because pets may be at risk.

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**NOTE TO PHYSICIAN:**

Probable mucosal damage may contraindicate the use of gastric lavage.

**PRODUCT CLAIMS**

- **Sterilant**
  - 100X dilution, 11 hours 20°C

- **Sporicidal**
  - 100X dilution, 11 hours 20°C

- **Bactericidal**
  - 100X dilution, 11 hours 20°C

- **Virucidal**
  - 100X dilution, 11 hours 20°C
  - *KILLS HIV-1 ON PRE-CLEANED ENVIRONMENTAL SURFACES/OBJECTS PREVIOUSLY SOILED WITH BLOOD/BODY FLUIDS in health care settings or other settings in which there is an expected likelihood of soil ing of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids which can be associated with the potential for transmission of human immunodeficiency virus Type 1 (HIV-1) (associated with AIDS).

- **Fungicidal**
  - 100X dilution, 11 hours 20°C
  - Effective against non-tuberculous mycobacterium (chelonae abscessus 100X dilution, 10 min. 20°C

- **Effective against non-food contact surfaces**
  - 32X dilution, 10 min. 20°C
  - (food contact surfaces 320X dilution, 1 min. 25°C
  - Staphylococcus aureus and Escherichia coli)

- **Hospital Disinfectant**
  - 100X dilution, 10 min. 20°C

- **Broad Spectrum Disinfectant**
  - 100X dilution, 10 min. 20°C

- **Germicidal Spray Disinfectant**
  - 100X dilution, 10 min. 20°C

- **RO Membrane Sanitizer**
  - 100X dilution, 36 min. 20°C

**SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV OF SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS:**

**PERSONAL PROTECTION:** Specific barrier protection items to be used when handling items soiled with blood or body fluids are disposable latex gloves, gowns, masks, and eye coverings.

**CLEANING PROCEDURE:** Blood and other body fluids must be thoroughly cleaned from surfaces and objects before application of the sterilant.

**DISPOSAL OF INFECTIOUS MATERIALS:** Blood and other body fluids should be autoclaved and disposed of according to federal, state and local regulations for infectious waste disposal.

**CONTACT TIME:** Leave surfaces wet for 11 hours.

**GENERAL DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

DO NOT USE AFTER EXPIRATION DATE. Do not allow MINNCARE Cold Sterilant to mix with alkaline substances such as bleach (Sodium Hypochlorite).

If spilled, flush away with large quantities of water. Use purified water when diluting MINNCARE Cold Sterilant.

MINNCARE Cold Sterilant is a single-use product not intended for reuse. Fresh sanitizing solution should be prepared daily or more often if the solution becomes diluted or soiled.

**DIRECTIONS FOR STERILIZATION**

MINNCARE Cold Sterilant may be used as a sterilant in any application other than a health care setting/hospital. For use on hard, non-porous surfaces such as plastics, stainless steel objects or containers, glass used by laboratories, manufacturers of pharmaceuticals, medical products, and cosmetics. Examples include glassware, laboratory instruments, containers, etc. Remove any obvious debris or organic material from the surface to be sterilized. This can often be accomplished by rinsing with purified water, mechanical action, or by detergent cleaning followed by a water rinse. Dilute MINNCARE Cold Sterilant 100X (1 part...
DIRECTIONS FOR HOSPITAL DISINFECTION
MINNCARE Cold Sterilant is to be used on hard, non-porous surfaces such as plastic, glass, or stainless steel in settings such as hospitals, clinics, or physician’s offices. Examples include counters, beds, bathroom fixtures and bedpans. This product is not to be used as a terminal high level disinfectant. To prepare 1% solution, dilute 10 ml of concentrated MINNCARE Cold Sterilant per cubic meter of room volume using a 0.3 to 10% aqueous diluted solution using any fogging equipment that is capable of achieving the desired droplet size of 0.5 to 15 microns and is constructed of compatible materials. Review the operations manual provided by the fogging equipment manufacturer for specific directions on the use of this equipment. Dilution directions: To obtain an aqueous diluted solution of 0.3%, add 0.3 ml of concentrated MINNCARE Cold Sterilant to 99.7 ml of hot purified water (i.e. RO or DI). To obtain an aqueous diluted solution of 10%, add 10 ml of concentrated MINNCARE Cold Sterilant to 90 ml of hot purified water (i.e. RO or DI). Allow surfaces to dry thoroughly before operations are resumed. Note: Once diluted, the solution must be used within 7 days. Discard any unused solution.

DIRECTIONS FOR SANITIZING OF REVERSE OSMOSIS MEMBRANES
MINNCARE Cold Sterilant is recommended for sanitizing reverse osmosis membranes and their associated distribution systems. This product has been shown to be an effective disinfectant when tested by AOAC and EPA methods. MINNCARE Cold Sterilant is not to be used as a substitute for water to clean or sanitize reverse osmosis membranes and their associated piping systems due to their construction and/or assembly, but can be relied upon to reduce the number of microorganisms to acceptable levels when used as directed. The possibility of recontamination by the incoming water supply may exist. MINNCARE Cold Sterilant should be used in a sanitation program, which includes bacteriological monitoring of the entire RO water system.

MINNCARE Cold Sterilant may be used for reverse osmosis (RO) systems, which are compatible with diluted hydrogen peroxide solutions. The MINNCARE Cold Sterilant has a shelf life of one year. MINNCARE Cold Sterilant should not be stored at its 1% use dilution since this may compromise its effective concentration. This product is not registered for use on kidney dialyzers and dialysis machines.

MINNCARE Cold Sterilant should be used to determine the temperature and pH range acceptable for the particular membranes. At a 100X dilution (1%), the pH range for MINNCARE Cold Sterilant is 3.0-3.5. RO water systems vary in design according to the particular needs of the user. Because of the variations in materials of construction at different facilities, some systems may have components of pumps, gaskets, etc. that are not compatible with long term exposure to MINNCARE Cold Sterilant. MINNCARE Cold Sterilant is to a degree, corrosive to copper, brass, iron and certain other metals. MINNCARE Cold Sterilant has also exhibited a decreased resistance to latex and Buna-N with extended exposure. MINNCARE Cold Sterilant Solution has been found to be compatible with typical materials such as stainless steel. It is also compatible with polypropylene, high-density polyethylene, polysulfone, Teflon polypropylene, and neoprene ABS, nylon, acrylic silicone, Plexiglas, ethylene propylene, VITON, FLUOREL, PVC and CPVC.

Because of the individuality of the RO water system in design and construction as well as the quality of raw feed water, all RO water does not contain the same components. Dependent upon your particular system, all or portions of the following procedure may be for sanitizing.

Biological or organic fouling of the membrane or other parts of the system should be removed with the appropriate cleaner. It is important to follow the membrane manufacturer’s recommended cleaning procedure. After cleaning, flush the system. Mineral deposits should be removed with an acidic cleaner prior to sanitizing of the membrane. Again, follow the membrane manufacturer’s recommended cleaning procedure. Then flush the unit with RO permeate. The presence of iron or other transition metals, in conjunction with the hydrogen peroxide in MINNCARE Cold Sterilant, could cause membrane degradation. Prepare a 1% solution (1 part MINNCARE Cold Sterilant to 99 parts water) by adding the MINNCARE Cold Sterilant solution to permeate water. Fill the entire water circuit to be sanitized with a 1% solution and allow the solution to reach a minimum temperature of 20°C (68°F). Do not exceed the membrane manufacturer’s recommended temperature. Recirculate the 1% MINNCARE Cold Sterilant solution until all elements are filled. Allow the elements to soak in the 1% MINNCARE Cold Sterilant solution for a minimum of 36 minutes at 20°C (68°F).

Rinse the RO system and check for residuals by following the directions on the MINNCARE Residual Test Strips label. The residual test strip should indicate less than 2ppm. Rinse times will vary depending on the size of the RO system. Residual sanitizer that may enter the system because of chemical rebound can be eliminated by diverting product water to drain for a short period of time.

DIRECTIONS FOR USE AS A GERMICIDAL DISINFECTANT SPRAY
For use as a germicidal spray on hard surfaces such as floors, walls, bathroom fixtures, vinyl or Formica surfaces. Use at the 1% dilution for at least 1 minute. Rinse with purified water after application. Drain off excess water, if possible, and allow to air dry.

DIRECTIONS FOR USE AS A CLEANER/SANITIZER
MINNCARE Cold Sterilant may be used to sanitize hard, non-porous surfaces such as glass or stainless steel used in fillers, pipelines, silos, processing vats, bulk tanks and utensils used in dairies, food processing plants, wineries and breweries. Using water or mechanical action, remove heavy soil, gross food particles or gross filth from hard surfaces such as Formica, stainless steel, glass, or plastic. Using an appropriate detergent or cleaner, wash surfaces or objects. Rinse with potable water. Remove any food products or packaging materials from the room or cover completely. Dilute MINNCARE Cold Sterilant at 2 ounces to 5 gallons of water. Use fresh solution with each use. Fresh sanitizing solution should be prepared daily or more often if the solution becomes diluted or soiled. Dip, spray, brush or fill equipment with solution and allow to sit at least 1 minute at 75°F (24°C). Allow to drain well. Do not rinse. Blow or air dry.

USES
Primarily intended use with surfaces such as:
- Reverse Osmosis Membranes and Associated Distribution Systems
- Plastic items
- Stainless Steel Objects or containers e.g. beds, tanks
- Hard Surfaces e.g. counters, sinks, bulk tanks etc.
- Floors, Walls, Bathroom Fixtures, Vinyl surfaces
- Formica surfaces
- Glass

STORAGE AND DISPOSAL
Do not contaminate water, food or feed by storage or disposal. Pesticide Storage
Store in shipping carton. Do not expose to direct sunlight. Maintain temperature below 75°F (24°C). Avoid contact with combustible materials. Avoid contamination from any source, including metals, dust, etc. Contact your State or Environmental Control Agency for guidance.

Container Disposal
Nonrefillable container. Do not re-use or refill this container. Offer for recycling, if available.

For 5 gal.: Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into sanitization equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times.

For >5 gal.: Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into sanitization equipment or a mix tank. Fill the container 1/4 full with sanitizing solution and tighten cap. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand container on its end and tip it back and forth several times. Empty rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.