



U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (504C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:  
71032-1

Date of Issuance:  
April 14,  
1998

NOTICE OF PESTICIDE:  
 Registration  
 Reregistration

Term of Issuance:  
Conditional

Name of Pesticide Product: UNISEPT

Name and Address of Registrant (include ZIP Code):  
Unichem, Inc.  
916 West Main Street, Haw River, NC 27258

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.  
Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
2. Make the following label changes:
  - a. Revise the EPA Registration Number to read, "EPA Reg. No. 71082-1".
  - b. The appropriate Est. No. should appear on the labeling.
  - c. Delete the term, "milk", from the "Note to Physician" section.

Signature of Approving Official: Marshall Swindell, Product Manager(33)  
*Marshall Swindell*

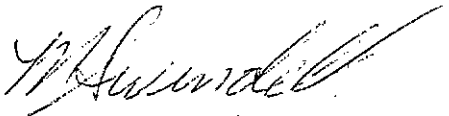
Date:  
MAY 01 1998

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EPA Reg. No.

3. Submit two copies of the revised final printed label for the record.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



Marshall Swindell  
Product Manager(33)  
Regulatory Management Branch I  
Antimicrobial Division(7510W)

[FRONT LABEL PANEL]

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

APR 14 1998

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.

71082-1

# UNISEPT™

**A Fungistat and Bacteriostat  
for Incorporation or Topical Treatment  
of Various Products as Listed**

**ACTIVE INGREDIENTS:**

Ethanol, 2,2'-(cocoimino) - bis, salt with Phosphoric acid, bis (2-ethylhexyl) ester (1:1) .....	66.4%
Ethanol, 2,2'-(cocoimino) - bis, salt with Phosphoric acid, mono (2-ethylhexyl) ester (1:) .....	15.9%
Phosphoric acid, mono (2-ethylhexyl) ester .....	17.7%
<b>TOTAL:</b> .....	<b>100.0%</b>

**KEEP OUT OF REACH OF CHILDREN**

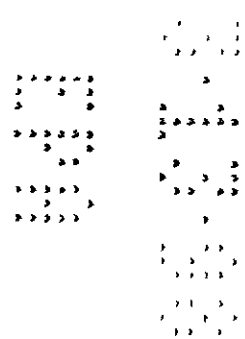
**DANGER**

**Statement of Practical Treatment:** In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse. If swallowed, drink large quantities of milk, egg whites, gelatin solution. If these are not available, drink large quantities of water. Avoid alcohol. Call a physician immediately.

**Note to Physician:** Probable mucosal damage may contraindicate the use of gastric lavage, measures against circulatory shock, respiratory depression and convulsion may be needed.

See side (or back) panel for additional precautions

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**[SIDE/BACK LABEL PANEL]****PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS & DOMESTIC ANIMALS**

**DANGER: CORROSIVE**, causes eye and skin damage. May be absorbed through the skin. Do not get in eyes, on skin or on clothing. Wear goggles or face and rubber gloves when handling. May cause skin sensitization. Harmful if swallowed. Avoid contamination of food.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**DIRECTIONS FOR USE:** It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**STORAGE & DISPOSAL**

**Storage:** Store at ambient temperature.

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

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

**General:** Consult Federal, State and local disposal authorities for alternative procedures.

**GENERAL INFORMATION:** Durable, broad-spectrum bacteriostat and fungistat for incorporation or topical treatment of various products as listed. Incorporation or topical treatment of UNISEPT™ will protect against deterioration from bacteria and fungi and thus encourages hygienic freshness. Protected products will resist odor and inhibit the growth of bacteria and fungi.

**AS A FUNGISTAT AND BACTERIOSTAT FOR CARPETS:** Construction of carpet containing UNISEPT™, an amine salt represents a new technology in providing long lasting properties throughout the carpet. We are now able to introduce the antimicrobial agent by chemically bonding it within the primary backing of the carpet during the curing process. Once bonded, there is no loss of bacteriostatic and fungistatic efficacy due to wear.

Carpet containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram-positive and Gram-negative odor causing bacteria, fungi and molds.

This product is intended for use only in conjunction with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., floor carpeting.

Mix UNISEPT™ directly into the polymeric emulsion at a level from 0.1 - 2% based on the total weight of the emulsion. Mixing should be done in the same kettle and at the same time that the polymeric emulsion backing is formulated.

**AS A BACTERIOSTAT AND FUNGISTAT FOR EPOXY FLOORING, COATING, TILE AND GROUT PRODUCTS:** Epoxies formulated with UNISEPT™ for use in flooring and floor coating systems, wall, ceiling, and industrial coating systems, and tile and grout systems represent new technology in providing long-lasting protection against a broad spectrum of both gram-positive and gram-negative odor causing bacteria as well as fungi. UNISEPT™ is introduced into the epoxy system during formulation. Once formulated, there is no loss of efficacy due to washing or wear. The bacteriostatic and fungistatic properties are immediate on contact in the presence of moisture.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., epoxy flooring and coating systems.

UNISEPT™ is introduced during the formulation of the epoxy system at a level of 0.2 - 5%, based on the total weight of all the components of the flooring, coating, tile or grout system.

**AS A FUNGISTAT AND BACTERIOSTAT FOR VINYL PRODUCTS, INCLUDING WALL COVERINGS, CAR TOPS, AWNINGS, TARPAULINS, TENTS, SAILS, DRAPES, SHOWER CURTAINS, CUBICLE CURTAINS, FILM TO BE USED FOR PURPOSES OTHER THAN FOOD STORAGE, AND FLOORING PRODUCTS:** Incorporation into vinyl of UNISEPT™ represents new technology in providing long lasting properties throughout the vinyl. We are no able to introduce the antimicrobial agent by formulating it within the vinyl during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear.

Vinyl containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds;

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished vinyl products.

Mix UNISEPT™ directly into the vinyl plastisol at a level from 1-5 percent based on the

total weight of all the components of the vinyl formulation. If the vinyl polymer is in pellet form, UNISEPT™ should be tumble mixed with the pellets prior to extrusion.

**AS A FUNGISTAT AND BACTERIOSTAT FOR PLASTIC FURNITURE, EXCLUDING FURNITURE USED FOR FOOD SERVICE OR FOOD STORAGE:**

Construction of plastic furniture containing UNISEPT™ represents new technology in providing long-lasting properties throughout the product. We are now able to introduce the antimicrobial agent by chemically bonding it within the plastic during the manufacturing process. Once bonded, there is no loss of efficacy due to washing or wear.

Plastic furniture containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products.

Tumble mix UNISEPT™ with the thermoplastic resin at a level from 1 - 5 percent based on the weight of the formulated resin pellets, prior to extrusion.

**AS A FUNGISTAT AND BACTERIOSTAT FOR ACRYLIC, URETHANE, WAX AND VARNISH FLOOR SEALERS, FINISHES AND MAINTAINERS:**

Incorporation of UNISEPT™ into acrylic, urethane, wax and varnish floor sealers, finishes and maintainers represents new technology in providing long-lasting properties throughout these floor products. We are now able to introduce the antimicrobial agent by formulating it within the acrylic, urethane, wax or varnish during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear.

Acrylic, urethane, wax and varnish sealers, finishes and maintainers containing UNISEPT™ are effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products; e.g., floor sealers, finishes and maintainers.

Mix UNISEPT™ directly into the product formulation at a level of 0.1% to 5% based on the total weight of the product formulation.

**AS A FUNGISTAT AND BACTERIOSTAT FOR POLYVINYL ACETATE INDOOR AND OUTDOOR PAINTS:**

Incorporation of UNISEPT™ into polyvinyl acetate paints represents technology in providing long lasting properties throughout the paints. We are now able to introduce the antimicrobial agent by formulating it within the

paint during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear.

UNISEPT™ in polyvinyl acetate paints is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., paints.

Mix UNISEPT™ directly into the paint formulation at a level from 0.1 - 5 percent based on the total weight of all the components of the paint formulation.

**AS A FUNGISTAT AND BACTERIOSTAT FOR POLYMERIC LAMINATES, EXCLUDING LAMINATES USED FOR FOOD PREPARATION SURFACES:**

Incorporation of UNISEPT™ into polymeric laminate products represents new technology in providing long lasting properties throughout the laminate. We are now able to introduce the antimicrobial agent by formulating it within the polymer during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear.

UNISEPT™ in polymeric laminates is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., polymeric laminates.

Mix UNISEPT™ directly into the polymer at a level from 1 - 5 percent based on the total weight of all the components of the polymer formulation.

**AS A FUNGISTAT AND BACTERIOSTAT FOR POLYMER CONCRETE:**

Polymer concrete formulated with UNISEPT™ for use in flooring systems and tile and grout systems represents new technology in providing long lasting protection against a broad spectrum of both Gram positive and Gram negative odor causing bacteria as well as fungi. UNISEPT™ is introduced into the polymer during formulation. Once formulated, there is no loss of efficacy due to washing or wear. The bacteriostatic and fungistatic properties are immediate on contact in the presence of moisture.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., polymer concrete flooring and grout and tile systems.

UNISEPT™ is introduced during the formulation of the polymer at a level of 1 - 5% based on the total weight of the polymer.

**AS A FUNGISTAT AND BACTERIOSTAT FOR SYNTHETIC AND NON-WOVEN TEXTILE PRODUCTS, INCLUDING WALL COVERINGS, CAR TOPS, AWNINGS, TARPAULINS, TENTS, SAILS, DRAPES, SHOWER CURTAINS AND CUBICLE CURTAINS:** Incorporation into synthetic and non-woven textile products of UNISEPT™ represents new technology in providing long properties throughout the product. We are now able to introduce the antimicrobial agent by impregnating the textile material during the manufacturing process. Once impregnated, there is no loss of efficacy due to washing or wear under normal conditions.

Synthetic and non-woven textile material containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for the use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products; e.g., synthetic and non-woven textile products.

For synthetic fibers, tumble mix UNISEPT™ with the polymeric resins or pellets at a level of 1-5% based on the total weight of the formulated resins or pellets, prior to extrusion. For non-woven fabrics, mix UNISEPT™ directly into the polymeric binder at a level of 1-5% based on the total weight of the formulated binder.

**AS A FUNGISTAT AND BACTERIOSTAT FOR POLYMERIC PACKAGING FILM TO BE USED FOR PURPOSES OTHER THAN FOOD STORAGE:**

Incorporation of UNISEPT™ into polymeric packaging film represent new technology in providing long lasting properties throughout the packaging film. We are now able to introduce the antimicrobial agent by formulating it within the polymer during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear.

Polymeric packaging film containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into, finished products, e.g., polymeric packaging film.

Mix UNISEPT™ directly into the polymer at a level from 1 - 5 percent based on the total weight of all the components of the polymer formulation.

**AS A FUNGISTAT AND BACTERIOSTAT FOR WATER, OIL AND SOLVENT**



**BASED PAINTS, STAINS AND OTHER COATING SYSTEMS FOR USE ON INTERIOR AND EXTERIOR SURFACES, SUBSTRATES, MACHINERY AND EQUIPMENT, INCLUDING HEATING, VENTILATING AND AIR**

**CONDITIONING SYSTEMS:** Incorporation of UNISEPT™ into paints and other coating systems represents new technology in providing durable properties throughout the coating systems. We are now able to introduce the antimicrobial agent by formulating it within the coating system during the manufacturing process. Once formulated, there is no loss of efficacy due to washing to wear.

UNISEPT™ in coating systems is effective as a bacteriostat and fungistat against a broad spectrum of both gram-positive and gram-negative odor-causing bacteria and fungi (including mold and mildew).

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., paints and other coating systems.

Mix UNISEPT™ directly into the coating system formulation at a level from 0.1 - 5 percent, based on the total weight of all the components of the coating system.

**AS A FUNGISTAT AND BACTERIOSTAT FOR MOLDED POLYMERIC AND POLYMER CONCRETE BATH TUBS, SHOWERS, BATHROOM SINKS, BATHROOM COUNTERTOPS AND BATHROOM ACCESSORIES:**

Polymer and Polymer concrete formulated with UNISEPT™ represents new technology in providing durable protection against a broad spectrum of both Gram positive and Gram negative odor causing bacteria as well as fungi (including mold and mildew). UNISEPT™ is introduced into the polymer during formulation. Once formulated, there is no loss of efficacy due to washing or wear. The bacteriostatic and fungistatic properties are immediate on contact in the presence of moisture.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products.

UNISEPT™ is introduced during the formulation of the polymer at a level of 1-5% based on the total weight of the polymer.

**AS A FUNGISTAT AND BACTERIOSTAT FOR VARIOUS MOLDED POLYMER AND POLYMER CONCRETE PRODUCTS FOR GENERAL HOUSEHOLD,**

**INDUSTRIAL, COMMERCIAL AND HEALTH CARE USE:** Polymer and polymer concrete formulated with UNISEPT™ represents new technology in providing durable protection against a broad spectrum of both Gram positive and Gram negative odor causing bacteria as well as fungi (including mold and mildew). UNISEPT™ is introduced into the polymer during formulation. Once formulated, there is no loss of efficacy due to washing or wear. The bacteriostatic and fungistatic properties are immediate on contact in the

presence of moisture.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products.

UNISEPT™ is introduced during the formulation of the polymer at a level of 1-5% based on the total weight of the polymer.

**AS A FUNGISTAT AND BACTERIOSTAT FOR NATURAL AND SYNTHETIC POLYMERIC SEALANTS, ADHESIVES AND CAULKING COMPOUNDS:**

Polymeric sealants, adhesives and caulking compounds formulated with UNISEPT™ represent new technology in providing durable protection against a broad spectrum of both Gram positive and Gram negative odor causing bacteria as well as fungi (including mold and mildew). UNISEPT™ is introduced into the polymer during formulation. Once formulated, there is no loss of efficacy due to washing or wear. The bacteriostatic and fungistatic properties are immediate on contact in the presence of moisture.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished products, e.g., polymeric sealants, adhesives and caulking compounds.

UNISEPT™ is introduced during the formulation of the polymer at a level of 1-5% based on the total weight of the polymer.

**AS A FUNGISTAT AND BACTERIOSTAT FOR TEXTILE UPHOLSTERY, MATTRESSES, MATTRESS TICKING AND MATTRESS COVERS:**

Incorporation or topical treatment of textile upholstery, mattresses, mattress ticking and mattress covers represents new technology in providing durable properties throughout these products. We are now able to introduce the antimicrobial agent by impregnating or topically treating the textile material. Once impregnated or treated, there is no loss of efficacy due to washing or wear under normal use conditions.

Textile material containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and commercial field applications and is not intended to come into the hands of the general public except after treatment of or incorporation into textile products.

For synthetic fibers, tumble mix UNISEPT™ with the polymeric resins or pellets at a level of 1 - 5% based on the total weight of the formulated resins or pellets, prior to extrusion. For nonwoven fabrics, mix UNISEPT™ directly into the polymeric binder at a level of 1-5% based on the total weight of the formulated binder. For topical application to wcover,

nonwoven and synthetic materials. expose (spray) fabric with a water emulsion containing UNISEPT™ at a 1 - 5% concentration and allow to dry.

**AS A FUNGISTAT AND BACTERIOSTAT FOR VINYL UPHOLSTERY, MATTRESSES, MATTRESS TICKING AND MATTRESS COVERS:** Incorporation of UNISEPT™ into vinyl upholstery, mattresses, mattress ticking and mattress covers represents new technology in providing durable properties throughout these products. We are now able to introduce the antimicrobial agent by formulating it within the vinyl during the manufacturing process. Once formulated, there is no loss of efficacy due to washing or wear under normal use conditions.

Vinyl containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished vinyl products.

Mix UNISEPT™ directly into the plastisol at a level from 1-5 percent based on the total weight of all the components of the vinyl formulation. If the vinyl polymer is in pellet form, UNISEPT™ should be tumble mixed with the pellets prior to extrusion.

**A FUNGISTAT AND BACTERIOSTAT FOR TOPICAL TREATMENT OF TEXTILE PRODUCTS, INCLUDING WALL COVERINGS, CAR TOPS, AWNINGS, TARPAULINS, TENTS, SAILS, DRAPES, SHOWER CURTAINS, CUBICLE CURTAINS, CARPETING AND INDUSTRIAL FABRICS:** Topical treatment of textile products with UNISEPT™ represents new technology in providing durable properties throughout these products. We are now able to introduce the antimicrobial agent by topically treating the textile material. Once treated, there is no loss of efficacy due to washing or wear under normal use conditions.

Textile material containing UNISEPT™ is effective as a bacteriostat and fungistat against a broad spectrum of both Gram positive and Gram negative odor causing bacteria, fungi and molds.

This product is intended for use only in connection with manufacturing processes and commercial field applications and is not intended to come into the hands of the general public except after incorporation or treatment of textile products.

Expose (or Spray) textile material with a water emulsion containing UNISEPT™ at a 1-5% concentration and allow to dry.

**AS A FUNGISTAT AND BACTERIOSTAT FOR AIR FILTERS TO BE USED IN FURNACES, AIR CONDITIONERS, AIR PURIFICATION DEVICES,**

**AUTOMOBILES, AND RECIRCULATING AIR HANDLING SYSTEMS:**

Incorporation of UNISEPT™ into air filter materials represents new technology in providing durable protection against a broad spectrum of both gram-positive and gram-negative odor-causing bacteria, fungi, and molds.

We are now able to introduce the antimicrobial agent by impregnating or topically treating the filter material during the manufacturing process. Once impregnated or treated, there is no loss of efficacy due to washing or wear under normal use conditions.

This product is intended for use only in connection with manufacturing processes and is not intended to come into the hands of the general public except after incorporation into finished filter products.

For synthetic polymeric filter materials, mix UNISEPT™ with the polymeric resins or pellets at a level of 1-5% based on the total weight of the formulated resins or pellets, prior to extrusion. For nonwoven textile filter materials, mix UNISEPT™ directly into the polymeric binder at a level of 1-5% based on the total weight of the formulated binder. For topical treatment of polyurethane foam, fiberglass, and woven and nonwoven, and synthetic fibrous and particulate filter materials, disperse UNISEPT™ evenly onto the filter material and dry to a final concentration of ≤ 5% of the dry weight of the filter.

**WARRANTY DISCLAIMER:** Unichem warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. UNICHEM MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

**Inherent Risk of Use**

It is impossible to eliminate all risks associated with the use of this product. Article damage, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions, abnormal article conditions, presence of other materials, the manner of application, or other factors all of which are beyond the control of Unichem or the seller. All such risks shall be assumed by the buyer.

EPA Reg. No. 71082-\_\_\_\_\_  
EPA Est. No. ©71082-NC-1; ©71082-SC-1  
Superscript used in lot number (© or ©) represents establishment location.

UNICHEM, INC.  
916 W. Main Street  
Haw River, North Carolina 27258