PREVENTOL® D 7

FOR INDUSTRIAL USE AS A PRESERVATION TO INHIBIT THE GROWTH OF BACTERIA, FUNGI, YEAST AND ALGAE IN PAINTS AND COATINGS, PIGMENT AND MINERAL SLURIES, ADHESIVES AND TACKIFIERS, POLYMER EMULSIONS, METAL WORKING FLUIDS, DISPERSED PIGMENTS, BUILDING MATERIALS, FOUNTAIN SOLUTIONS, PHOTOPRINTING, INKS, PAPER MILL PROCESS WATER, REcirculating COOLING WATER SYSTEMS, BREWERY PASTEURIZED AND CAN WARMER SYSTEMS, HYDRAULIC FLUIDS, OIL & GAS FIELDS INJECTION WATERS, AIR WASHER SYSTEMS, REcirculating ELECTRODEPOSITION SYSTEMS, METAL CLEANING FLUIDS, COMMERCIAL PHOTOPRINTING SYSTEMS

KEEP OUT OF REACH OF CHILDREN

DANGER

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. CORROSIVE. Causes irreversible eye damage and skin burns. Harmful if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Mixers, loaders and others exposed to this product must wear: long sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber; shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product’s concentrate. Do not reuse them. Follow manufacturer’s instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. User should wash hands before eating drinking, chewing gum, using tobacco, or using the toilet. User should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. User should remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to fish and wildlife. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public 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 sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste.

IN CASE OF EMERGENCY, CALL: CHEMTREC 800-424-9300
INTERNATIONAL 703-527-3887

EPA Reg. No.: 39967-93
EPA Est. No.: 39967-DEU-001

Net Contents: 13gal 27fl oz (50kg)
Lot No.:

LANXESS Corporation
111 RIDC Park West Drive • Pittsburgh, PA 15275-1112

ACTIVE INGREDIENTS:
5-chloro-2-methyl-4-isothiazolin-3-one ........................................... 1.1%
2-Methyl-4-isothiazoline-3-one .................................................. 0.4%

INERT INGREDIENTS: .......................................................... 98.50%

TOTAL: .................. 100%

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply in a way that will contact workers or other persons. The amount necessary for desired protection varies, depending on exposure conditions. For further application information refer to the Product Bulletin.

STORAGE AND DISPOSAL

Keep container closed when not in use.

PESTICIDE STORAGE: Product should be stored in an area that is not subject to extreme temperatures; store in a cool, dry place. Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment. Do not apply this product in a way that will contact workers or other persons.

PESTICIDE DISPOSAL: 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 environmental control agency, or the hazardous waste representative at the nearest regional office for guidance.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available or reconditioning if appropriate. Triple rinse (or equivalent), Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration or, if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

FIRST AID

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

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 immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

Have the product container or label with you when calling a poison control center or doctor for treatment. You may also contact 1-800-410-3036 for emergency medical treatment information.

The LANXESS Pittsburgh Emergency Response Telephone Number is 800-410-3036.

*Preventol is a registered trademark of LANXESS Corporation

Mix well before using this product.

DRAFT 7/24/2012
00141201
PREVENTOL® D 7

EPA Registration Number 39967-93
CAS Number: 55965-84-9
PREVENTOL® D 7

FOR INDUSTRIAL USE AS A PRESERVATION TO INHIBIT THE GROWTH OF BACTERIA, FUNGI, YEAST AND ALGAE IN PAINTS AND COATINGS, PIGMENT AND MINERAL SLURRIES, ADHESIVES AND TACKIFIERS, POLYMER EMULSIONS, METAL WORKING FLUIDS, DISPERSED PIGMENTS, BUILDING MATERIALS, FOUNTAIN SOLUTIONS, INKS AND PHOTOPLATE PROCESSING, PAPER MILL PROCESS WATER, RECIRCULATING COOLING WATER SYSTEMS, BREWERY PASTEURIZER AND CAN WARMER SYSTEM, HYDRAULIC FLUIDS, OIL & GAS FIELDS INJECTION WATERS, AIR WASHER SYSTEMS, RECIRCULATING ELECTRODEPOSITION SYSTEMS, METAL CLEANING FLUIDS, COMMERCIAL PHOTOPROCESSING SYSTEMS

DIRECTIONS FOR USE

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

The following guidance is given as an approximation for each use pattern, but field-testing is recommended to achieve optimum effectiveness.

PAINTS AND COATINGS
PREVENTOL® D 7 is recommended as an in-container preservative for the control of microorganisms in water-based coatings such as paints, paper and wood coatings used for architectural product finishes and special-purpose coatings. The preservative is best incorporated into the products just following the initial additional of water or other liquid components sufficient to dissolve the preservative. If incorporation happens at a later stage in production; stir to ensure homogeneous distribution of the preservative throughout the product. Add 0.43 – 1.65 pounds of PREVENTOL® D 7 to each 1000 pounds of fluid to provide 425 to 1,675 ppm product (6.25 - 25 ppm active isothiazolones).

PIGMENT AND MINERAL SLURRIES
PREVENTOL® D 7 is an in-container preservative for the control of microorganisms in the manufacture and storage of dispersed pigments and mineral slurries such as kaolin clay, montmorillonite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate, carbon black, iron oxide, and diatomaceous earth used in paint and paper production. Add 0.43 – 1.65 pounds of PREVENTOL® D 7 to each 1000 pounds of fluid to provide 425 to 1,675 ppm product (6.25 -25 ppm active isothiazolones).
ADHESIVES AND TACKIFIERS
PREVENTOL® D 7 is recommended as an in-container preservative for the control of microorganisms in water-soluble and water-dispersed adhesives such as animal glues, plant glues, starch-based glues, natural rubber latexes, polyvinyl acetate, styrene butadiene, and acrylic latexes. PREVENTOL® D 7 is a preservative for tackifiers derived from rosin and hydrocarbon resins. Add 0.43 – 1.65 pounds of PREVENTOL® D 7 to each 1000 pound of fluid to provide 425 to 1,675 ppm product (6.25 - 25 ppm active isothiazolones).

POLYMER EMULSIONS
PREVENTOL® D 7 is recommended for the control of microorganisms in the manufacture and storage of synthetic and natural polymer emulsions and latexes including: acrylics; styrene/butadiene; carboxylated styrene/butadiene; ethylene/vinyl acetate including PVA; and biopolymers intended for industrial use, such as xanthan gum, gum arabic, guar gum, protein-derived polymers, starches, and casein-derived polymers. Add 0.43 – 3.3 pounds PREVENTOL® D 7 to each 1000 pounds of emulsion to provide 425 to 3,350 ppm product (6.25 - 50 ppm active isothiazolones). To ensure uniform mixing, add PREVENTOL® D 7 to polymer emulsion or latex solutions slowly with agitation.

DISPERSED PIGMENTS
PREVENTOL® D 7 is an in-container preservative for the control of microorganisms in the manufacture and storage of dispersed pigments and mineral slurries such as kaolin clay, montmorillonite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate, carbon black, iron oxide, and diatomaceous earth (kieselguhr) used in paint and paper production. Add 0.43 – 1.65 pounds of PREVENTOL® D 7 to each 1000 pounds of fluid to provide 425 to 1,675 ppm product (6.25 - 25 ppm active isothiazolones).

BUILDING MATERIALS
PREVENTOL® D 7 is recommended as an in-container preservative for the control of microorganisms in building materials such as grouts, mastics, caulks, joint cements, and spackling. Add 0.43 – 1.65 pounds of PREVENTOL® D 7 to each 1000 pounds of building material to provide 425 to 1,675 ppm product (6.25 - 25 ppm active isothiazolones).

PAPER MILL PROCESS WATER
Add as a slug dose apply 0.44 to 1.5 pounds of PREVENTOL® D 7 per ton (dry basis) of pulp or paper produced for the control of microbial slime in the production paper. Repeat daily as needed. Heavily fouled systems should be boiled out prior to initial dosing. PREVENTOL® D 7 should be added at a point such as the beater, hydropulper, fan pump, or broke storage pump to ensure uniform mixing.

RECYCLATING COOLING WATER SYSTEMS
Add 0.3 – 1.86 pounds PREVENTOL® D 7 per 1000 gallons of cooling water in the system weekly to maintain microbial control. Add PREVENTOL® D 7 to a point in the cooling water system to ensure uniform mixing. For noticeably fouled systems dose as initial treatment with 1.26 – 7.46 pounds PREVENTOL® D 7 per 1000 gallons cooling water. Repeat as necessary to achieve control.

BREWERY PASTEURIZER AND CAN WARMER SYSTEMS
PREVENTOL® D 7
39967-93
Page 3
Add 0.31 – 1.92 pounds PREVENTOL® D 7 Preservative per 1000 gallons of water in the system weekly or as needed to maintain control of microorganisms. For noticeably fouled systems dose as initial treatment with 1.27 – 7.75 pounds PREVENTOL® D 7 per 1000 gallons of water. Repeat as necessary to achieve control.

HYDRAULIC FLUIDS
PREVENTOL® D 7 is used as a preservative for use in the manufacture and use of water-based hydraulic fluids and invert emulsion hydraulic fluids typically prepared by emulsifying 40% by volume water in 60% by volume mineral oil using an oil soluble emulsifying agent.

For the maintenance of a non-fouled system, use PREVENTOL® D 7 at 7.2 – 8.8 pounds per 1000 gallons hydraulic fluid every eight weeks. For a noticeably fouled system use an initial dose of 8.8 – 15.4 pounds PREVENTOL® D 7 per 1000 gallons fluid to be followed by subsequent maintenance dosing. PREVENTOL® D 7 should be dosed into the circulating use-dilution of the hydraulic fluid using a metering pump or by manual pouring, and uniformly dispersed throughout the system.

OIL & GAS FIELDS INJECTION WATERS
Add 23.5 to 58.0 pounds PREVENTOL® D 7 per 1000 barrels of water weekly or as needed to maintain control of slime-forming and sulfate reducing bacteria in oil and gas field water systems including enhanced recovery injection fluids, fracturing, completion and drilling fluids. An initial dose of 58.0 to 116.8 pounds PREVENTOL® D 7 per 1000 barrels of water may be used until microbial control is achieved. Dose again after three days or as needed until microbial control is achieved. Add at a point in the system to ensure adequate mixing.

AIR WASHER SYSTEMS
For use only in industrial air washing systems with effective mist eliminating elements. Badly fouled air washer systems must be cleaned before initial dosing. Add PREVENTOL® D 7 to the air washer sump or chill water sump to ensure uniform mixing for the control of microorganisms.

Intermittent or slug dosing:
Initial dosing: when system is noticeably fouled, add 1.26 – 7.46 pounds PREVENTOL® D 7 to 1000 gallons of air washer water.

Maintenance dosing: when microbial control is evident, dose 0.3 – 1.86 pounds PREVENTOL® D 7 to 1000 gallons of air washer water.
Repeat treatment as needed depending on the severity of contamination.

Continuous dosing method:
Initial dosing: when system is noticeably fouled, add 1.26 – 7.46 pounds PREVENTOL® D 7 to 1000 gallons of air washer water.
Maintenance dosing: Add a continuous dose of 0.3 – 1.86 pounds PREVENTOL® D 7 to 1000 gallons air washer make-up water.
Repeat treatment as needed depending on the severity of contamination.

RECIRCULATING ELECTRODEPOSITION SYSTEMS
PREVENTOL® D 7 is used as a tankside additive for the control of microorganisms in recirculating systems and associated rinse systems. Alternatively, PREVENTOL® D 7 may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.
TANKSIDE ADDITION TO ELECTRODEPOSITION SYSTEMS: PREVENTOL\textsuperscript{®} D 7 should be dispensed into the recirculating rinse system, ultrafilter permeate, or final distilled rinse system at a point to insure uniform mixing.

Initial dose: When the system is noticeably fouled, add 667-2333 ppm PREVENTOL\textsuperscript{®} D 7. This provides 10 to 35 ppm of active isothiazolone. Repeat until microbial control is achieved.

Subsequent dose: When microbial control is evident, add 333 -1000 ppm PREVENTOL\textsuperscript{®} D 7 weekly or as needed to maintain the system. This provides 5-15 ppm of active isothiazolone. A change of frequency of treatment may be required depending upon the rate of dilution of the preservative with the makeup fluids, the nature and severity of contamination, level of control required, filtration effectiveness and system design.

METAL CLEANING FLUIDS
PREVENTOL\textsuperscript{®} D 7 is used as a preservative in the manufacture and use of alkaline, acid and emulsion based metal cleaning fluids typically used in electroplating, phosphatizing, galvanizing and general metal cleaning operations. For addition to a metal cleaning concentration, add PREVENTOL\textsuperscript{®} D 7 at a level to ensure that the final use-dilution fluid will contain 425 – 1675 ppm product (6.25 – 25 ppm isothiazolone). For direct addition to a fouled system, add 3.6 – 14.0 pounds PREVENTOL\textsuperscript{®} D 7 to each 1000 gallons of use-dilution metal cleaning fluid every three to four weeks to provide 425 – 1675 ppm product (6.25 – 25 ppm isothiazolone). PREVENTOL\textsuperscript{®} D 7 should be dispensed into the use-dilution of the metal cleaning fluid using a metering pump or by manual pouring and uniformly disperse throughout the system.

COMMERCIAL PHOTOPROCESSING SYSTEMS
PREVENTOL\textsuperscript{®} D 7 is recommended to prevent slime formation or accumulation in filters and ion exchange resin tanks of commercial photoprocessing systems.

For the maintenance of a non-fouled system, use PREVENTOL\textsuperscript{®} D 7 at 2.21 – 4.2 pounds per 1000 gallon fluid in the system once weekly, or as needed to maintain control of slime every eight weeks. For a noticeably fouled system, use an initial dose 4.2 – 10. pounds per 1000 gallon fluid to be followed by subsequent maintenance dosing. Increased frequency of treatment may be required depending upon rate of dilution of the preservative with makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc. PREVENTOL\textsuperscript{®} D 7 should be dispensed into the final rinse or used water collection tank for adequate distribution.

PHOTOPLATE PROCESSING, FOUNTAIN SOLUTIONS AND INK COMPONENTS
PREVENTOL\textsuperscript{®} D 7 is recommended for the control of bacteria, fungi and microbial biofilms in photoplate processing chemicals, fountain solutions, and printing inks and ink components. PREVENTOL\textsuperscript{®} D 7 should be added to achieve 0.1% to 0.3% (15 – 45 ppm active ingredient). For fountain solution, add PREVENTOL\textsuperscript{®} D 7 at concentration levels to ensure that the final use-dilution of the product will contain 0.1% - 0.3% (15-45 ppm active ingredient). To insure uniform mixing, add PREVENTOL\textsuperscript{®} D 7 to latex or solution slowly with agitation. The actual concentrations required will depend upon such factors as the specific substance to be
treated, frequency of repeated microbial contamination expected and level of protection required.

METALWORKING FLUIDS
PREVENTOL® D 7 is recommended for the control of bacteria, fungi and microbial biofilms in soluble and emulsifiable-type aqueous metalworking fluids. For maintenance of a non-fouled system, use PREVENTOL® D 7 at 32 fluid ounce per 1000 gallon of emulsion (2 pounds) every 4 weeks or 32-148 fluid ounces per 1000 gallon emulsion (2-10 pound) every 8-12 weeks. This corresponds to (3.84-17.5 ppm active ingredient). For a noticeably fouled system, use an initial dose of 64-148 fluid ounce per 1000 gallon emulsion (4-10 pounds) to be followed by subsequent maintenance dosages depending upon the treatment interval noted above. This corresponds to (7.75-17.5 ppm active ingredient).

REMARKS
If you need assistance or information, please call your nearest LANXESS representative, or our Pittsburgh office at 800-LANXESS.

IN CASE OF EMERGENCY, CALL: CHEMTREC 1-800-424-9300
INTERNATIONAL (703)-527-3887

HAVE THE PRODUCT CONTAINER OF LABEL WITH YOU WHEN CALLING A POISON CONTROL CENTER OR DOCTOR OR GOING FOR TREATMENT.

LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, PA 15275
412-809-1000

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety and environmental standpoint. Such testing has not necessarily been done by LANXESS Corporation. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases LANXESS from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind LANXESS. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

3/12