



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

July 9, 2018

Patti Golick  
Registration Specialist  
Troy Chemical Corporation  
8 Vreeland Road  
Florham Park, NJ 07932

Subject: Notification per PRN 98-10 – Minor label modifications  
Product Name: Troy MERGAL K9N  
EPA Registration Number: 5383-103  
Application Date: June 4, 2018  
Decision Number: 541696

Dear Ms. Golick:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Antimicrobials Division (AD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, you may contact Tara Flint at (703) 348-0398 or via email at [flint.tara@epa.gov](mailto:flint.tara@epa.gov).

Sincerely,

A handwritten signature in dark ink, appearing to read "Zeno M. Bain". The signature is fluid and cursive, with the first name "Zeno" being more prominent than the last name "Bain".

For  
Zeno Bain, Product Manager 33  
Regulatory Management Branch 1  
Antimicrobials Division (7510P)  
Office of Pesticide Programs

# TROY MERGAL® K9N

Industrial Microbiocide for Adhesives, Air Washer Systems\*, Building Materials, Brewery Pasteurizer and Can Warmer Systems\*, Concrete Admixes, Conveyor Lubricants\*, Emulsions, Foam Control Products\*, Industrial Process Water Systems\*, Pigment Dispersions, Paints and Coatings, Metal Working, Hydraulic Fluids\*, Oil Field Injection Waters\*, Fuels\*, Recirculating Water Cooling Towers\* and Closed Loop Water Systems\*, Ultra Filtration Units\*, Household, Industrial and Janitorial Cleaning Products Including Floor Cleaners, Waxes, Polishes, and Surface Cleaners, Shampoos and Pre-spotters Laundry Additives including Liquid Laundry Detergents, Fabric Softeners, Silicone Emulsions and \*Surfactants and Stain Removers.

[\*Not registered for use in the State of California]

|                                              |               |
|----------------------------------------------|---------------|
| ACTIVE INGREDIENT: .....                     | % Weight      |
| 5 Chloro-2-Methyl-4-isothiazolin-3-one ..... | 1.14%         |
| 2-Methyl-4-isothiazolin-3-one .....          | 0.36%         |
| INERT INGREDIENTS.....                       | <u>98.50%</u> |
| TOTAL .....                                  | 100.00%       |

## NOTIFICATION

5383-103

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

07/09/2018

5383-103

EPA Reg. No.

EPA Establishment Number

5383-NJ-001

KEEP OUT OF REACH OF CHILDREN

DANGER

SOLD FOR INDUSTRIAL USE ONLY

See Side Panel for Additional Precautionary Statements

IN CASE OF EMERGENCY: CALL 1-800-424-9300

Net Weight:

[Manufactured for / Produced for / Sold by:]

Troy Chemical Corporation  
One Avenue L, Newark, N.J. 07105

AQUAMATE®, MERGAL® and TROYGUARD® are registered trademarks

## **PRECAUTIONARY STATEMENTS**

### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

## **DANGER**

Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, skin or clothing. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. This product may cause skin sensitization reactions in some people. Do not breathe vapor or spray mist. Wear goggles or face shield. Wear a NIOSH approved respirator with an organic vapor cartridge with a combination N, R or P filter with approval number prefix TC-84A; or NIOSH approved gas mask with a canister with approval number prefix TC-14G; or powered air purifying respirator with organic vapor cartridge and combination HE filter with NIOSH approval number prefix TC-23C.

### **PERSONAL PROTECTIVE EQUIPMENT (PPE):**

Mixers, loaders and others exposed to methylisothiazolinone products must wear:

- Long-sleeve shirt and long pants
- Chemical-resistant apron
- Chemical-resistant gloves
- Shoes plus socks

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 SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible wash thoroughly.

| <b>FIRST AID</b>                                                                                                     |                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IF IN EYES:</b>                                                                                                   | <ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the 5 minutes, then continue rinsing.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>                                                              |
| <b>IF ON SKIN OR CLOTHING:</b>                                                                                       | <ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>                                                                                                           |
| <b>IF SWALLOWED:</b>                                                                                                 | <ul style="list-style-type: none"> <li>• Call a poison control center or doctor for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul> |
| <b>IF INHALED:</b>                                                                                                   | <ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>                                           |
| Have the product container or label with you when calling a poison control center or doctor, or going for treatment. |                                                                                                                                                                                                                                                                                                                                                 |
| <b>NOTE TO PHYSICIAN:</b>                                                                                            |                                                                                                                                                                                                                                                                                                                                                 |
| Probable mucosal damage may contraindicate the use of gastric lavage.                                                |                                                                                                                                                                                                                                                                                                                                                 |

## **ENVIRONMENTAL HAZARDS**

This chemical is toxic to terrestrial and aquatic plants, fish and aquatic invertebrates. 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.

## **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Storage between 32°F (0°C) and 90°F (32°C) and is recommended.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticides, 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. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning if available, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## MASTER LABEL – Sub-label A:

Industrial Microbiocide for Adhesives, Air Washer Systems\*, Building Materials, Brewery Pasteurizer and Can Warmer Systems\*, Concrete Admixes, Conveyor Lubricants\*, Emulsions, Foam Control Products\*, Industrial Process Water Systems\*, Pigment Dispersions, Paints and Coatings, Metal Working, Hydraulic Fluids\*, Oil Field Injection Waters\*, Fuels\*, Recirculating Water Cooling Towers\* and Closed Loop Water Systems\* and Ultra Filtration Units\*.]

### DIRECTIONS FOR USE

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

Troy Mergal K9N is a microbiocide that is effective against bacteria, yeast and mold. It is used as an industrial microbiocide for **adhesives, building materials, pigment dispersions, emulsions, paints and coatings.**

Troy Mergal K9N is used to control bacteria and fungi in dispersed pigments such as kaolin clay, montmorillite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, and magnesium silicate used in paint and paper production. Typical emulsions include printing components (inks, resins, waxes, and surfactants). Building materials include mastics, caulks, joint cements, spackling, plasters and stuccos. Use as an in-can preservative in paints and coatings.

It is best if Troy Mergal K9N is added to the initial phase of production; however, if excessive temperatures or pH values occur, addition at the end of the manufacturing process is recommended.

Typical usage rates are 0.05-0.40% (0.05-0.40 lbs. per 100 lbs of formulation) based on the total weight of the formulation.

***Do not apply this product in a way that will contact workers or other persons.***

For the control of slime-forming and sulfate reducing bacteria in **oil and gas field systems\***, including **enhanced recovery injection fluids\*, drilling\*, fracturing\* and completion fluids\***, slug treat with 7-36 ppm depending on the severity of contamination. This product may be used for terrestrial and off-shore oil drilling muds and packer fluids. **Initial Dose:** Add 14-28 ppm (0.57– 1.2 gallon or 6.2 - 12.5 pounds Troy Mergal K9N per 1000 barrels of water) at a point in the system where it will be uniformly mixed. Repeat treatment after three days or as needed until control is achieved. **Subsequent dose:** Add 5.5-14 ppm (0.22-1.2 gallon or 2.4-6.2 pounds Troy Mergal K9N per 1000 barrels of water) every 7 days or as needed to maintain control. [\*Not registered for use in the State of California]

For Fuel Preservation\*, ***See accompanying product information sheet for full description of rates and directions for use.***

For Air Washer Systems\*, Brewery Pasteurizer and Can Warmer Systems\*, Conveyor Lubricants\*, Foam Control Products\*, Industrial Process Water Systems\*, Metal Working and Hydraulic Fluids\* Recirculating Water Cooling Towers\* and Closed Loop Water Systems\* and Ultra Filtration Units\*, ***See accompanying product information sheet for full description of rates and directions for use.***

[\*Not registered for use in the State of California]



## PRODUCT INFORMATION SHEET

TROY MERGAL® K9N, EPA REG. NO. 5383-103

This document must accompany each shipment of TROY MERGAL® K9N

### DIRECTIONS FOR USE

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

**\*Air Washer Systems:** For use only in industrial air washing systems that maintain effective mist eliminating components. Add 0.3 to 7.5 lb. of TROY MERGAL K9N to 1000 gallons of water (35 to 886 ppm TROY MERGAL K9N) in the air washer sump, or chill water sump to ensure uniform mixing, for the control of bacteria, fungi and algae. A repeat treatment may be needed depending on the severity of contamination.

**\*Brewery Pasteurizer and Can Warmer Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N to 1000 gallons of water in the system weekly or as needed to maintain control of bacteria, fungi and algae. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water may be needed depending on the severity of the fouling.

**\*Conveyor Lubricants:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in the manufacture and use of water-based conveyor lubricants. TROY MERGAL K9N should be dispensed into the conveyor lubricant concentrate and uniformly dispersed throughout the fluid or dispensed into the conveyor lubricant use- dilution feed line using a metering pump and uniformly sprayed onto the conveyor. TROY MERGAL K9N should be added to the conveyor lubricant concentrate at a level to ensure that the final use-dilution shall contain 200-1,000 ppm of TROY MERGAL K9N (3 -15 ppm active ingredient). Grossly contaminated systems must be cleared before treatment is begun.

**Initial Dose:** For a noticeably fouled system, meter in 8.3 pounds (126 fluid ounces) of TROY MERGAL K9N per 1,000 gallons of use-dilution conveyor lubricant. If necessary, continue metering 3.3-8.3 pounds (50-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant until control is achieved and only to maintain the level of TROY MERGAL K9N in the final use-dilution fluid at 400 – 1,000 ppm (6-15 ppm active ingredient).

**Subsequent Dose:** After establishing microbial control or to prevent fouling of a clean system, maintain the system at 3-15 ppm active ingredient by metering 1.7-8.3 pounds (26-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant.

**\*Preservative for Foam Control Products:** TROY MERGAL K9N is recommended as an in-container preservative for the control of bacteria and fungi in foam control products. Add 0.5 to 3.3 lb (227 g to 1.5 kg) of TROY MERGAL K9N to each 1,000 lb. (454 kg) of aqueous product to provide 7 ppm to 50 ppm active isothiazolinones.

**\*Industrial Process Water:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae in industrial process water systems including Retort Water Systems, Industrial Scrubbing Systems, Evaporative Condenser Water Systems, Hydrostatic Sterilizer Water Systems, and Coal Slurry Systems. It should be added at a point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water. Repeat if necessary to achieve control.

**Metalworking Fluids:** Recommended for the maintenance and control of bacteria in soluble and emulsifiable-type aqueous metalworking fluids.

**Maintenance:** For non-fouled systems use TROY MERGAL K9N at 32 fluid ounces per 1000 gallon of emulsion (2 pound) every 4 weeks or 32-148 fluid ounces per 1000 gallon of emulsion (2-10 pound) every 8-12 weeks. This corresponds to 250-1,167 ppm TROY MERGAL K9N (3.84-17.5 ppm active ingredient).

For fouled systems use an initial dose of 64-148 fluid ounces per 1000 gallon emulsion (4-10 pound) to be followed by subsequent maintenance dosages depending on the treatment interval already referenced. This corresponds to 500-1,167 ppm TROY MERGAL K9N or 7.5-17.5 ppm active ingredient.

The preservative should be dispensed into the use-dilution of the metalworking fluid using a metering pump and uniformly dispersed throughout the system.



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**\*Hydraulic Fluids:** Recommended for the manufacture and use of high 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.

**Maintenance:** For non-fouled systems use TROY MERGAL K9N at 110-135 fluid ounces (7.2-8.8 pound) per 1000 gallon fluid every 8 weeks. This corresponds to 980-1,200 ppm TROY MERGAL K9N or 15-18 ppm active ingredient.

For fouled systems use an initial dose of 35-235 fluid ounces (8.8-15.4 pound) per 1000 gallon fluid to be followed by subsequent maintenance dosages. This corresponds to 1,200-2,100 ppm TROY MERGAL K9N or (18-32 ppm active ingredient).

The preservative should be dispensed into the use-dilution of the hydraulic fluid using a metering pump and uniformly dispersed throughout the system.

### \*FUEL PRESERVATIVE

Recommended for the control of bacteria and fungi in crude oils, aviation fluids, kerosene, heating oils, residual fuel oils, coal slurries, liquefied petroleum gases, petrochemical feedstocks, diesel fuels and gasoline.

Dispense TROY MERGAL K9N directly into a fuel tank, storage tank, or flowing stream of fuel in a manner to ensure uniform distribution. Add TROY MERGAL K9N at 100-400 ppm (v/v) volume to volume of fluid. Repeat as necessary to maintain system.

**For aviation fuels, consult the FAA to determine acceptability prior to use in engines and/or aircraft.**

**\*Industrial Recirculating Closed Loop Water Cooling Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water in the system weekly to maintain control of bacteria, fungi and algae in the reservoir, recirculating line or some other point to ensure uniform mixing. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1,000 gallons of water may be needed depending on the severity of the fouling.

**\*Industrial Recirculating Water Cooling Towers:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae. It should be added to the tower basin or some other point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb. of TROY MERGAL K9N per 1,000 gallons of water. Repeat if necessary to achieve control.

**\*Ultra Filtration Units, such as Reverse Osmosis Membranes:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in ultra filtration units, such as reverse osmosis membranes. Add 10 to 333 ppm of TROY MERGAL K9N (0.15 to 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis membranes by either continuous feed or periodic injection. Compatibility of TROY MERGAL K9N with reverse osmosis membranes should be confirmed with membrane manufacturers. For the control of bacteria and fungi in carbon beds, add 10 to 333 ppm of TROY MERGAL K9N (0.15-5 ppm active ingredient). For periodic membrane cleaning, add 0.4 – 1.0 lb. of TROY MERGAL K9N to every 120 gallons of cleaning solution (6 – 15 ppm active ingredient). Badly fouled systems should be cleaned before treatment is begun.

### SUPPLEMENTAL DOSING:

Depending on the nature/severity of the contamination, if analysis indicates a loss of active ingredient(s) and further microbial control is necessary, product may be dosed with additional [Insert Product Name] microbiocide at a level to ensure that the final use-dilution product will not exceed the maximum concentration indicated (max dosage level ppm Insert Product Name).

[\*Not registered for use in the State of California]

**TROY CHEMICAL CORPORATION**

**One Avenue L**

**Newark, N.J. 07105**

MM02022018

## **MASTER LABEL – Sub-label B**

Industrial Microbiocide for Household, Industrial and Janitorial Cleaning Products Including Floor Cleaners, Waxes, Polishes, and Surface Cleaners, Shampoos and Pre-spotters Laundry Additives including Liquid Laundry Detergents, Fabric Softeners, Silicone Emulsions and \*Surfactants and Stain Removers.]

### **DIRECTIONS FOR USE**

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

Troy Mergal K9N is a microbiocide that is effective against bacteria, yeast and mold.

It is best if Troy Mergal K9N is added to the initial phase of production; however, if excessive temperatures or pH values occur, addition at the end of the manufacturing process is recommended.

**For Household Industrial and Janitorial products** use 0.05-0.15% (0.5-1.5 pounds per 1000 lbs. of product.

**\*Surfactants is not registered for use in the State of California**

***Do not apply this product in a way that will contact workers or other persons.***

## MASTER LABEL – Sub-label C

**[Sub-label C:** Industrial Microbiocide for Air Washer Systems\*, Brewery Pasteurizer and Can Warmer Systems\*, Conveyor Lubricants\*, Industrial Process Water Systems\*, Recirculating Water Cooling Towers\* and Closed Loop Water Systems\* and Ultra Filtration Units\*.]

[\*Not registered for use in the State of California]

### DIRECTIONS FOR USE

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

Troy Mergal K9N is a microbiocide that is effective against bacteria, yeast and mold. It is best if Troy Mergal K9N is added to the initial phase of production; however, if excessive temperatures or pH values occur, addition at the end of the manufacturing process is recommended.

***Do not apply this product in a way that will contact workers or other persons.***

**\*Air Washer Systems:** For use only in industrial air washing systems that maintain effective mist eliminating components. Add 0.3 to 7.5 lb. of TROY MERGAL K9N to 1000 gallons of water (35 to 886 ppm TROY MERGAL K9N) in the air washer sump, or chill water sump to ensure uniform mixing, for the control of bacteria, fungi and algae. A repeat treatment may be needed depending on the severity of contamination.

**\*Industrial Recirculating Water Cooling Towers:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae. It should be added to the tower basin or some other point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb. of TROY MERGAL K9N per 1,000 gallons of water. Repeat if necessary to achieve control.

**\*Industrial Recirculating Closed Loop Water Cooling Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water in the system weekly to maintain control of bacteria, fungi and algae in the reservoir, recirculating line or some other point to ensure uniform mixing. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1,000 gallons of water may be needed depending on the severity of the fouling.

***See accompanying product information sheet for full description of rates and directions for use for*** Brewery Pasteurizer and Can Warmer Systems\*, Conveyor Lubricants\*, Industrial Process Water Systems\* and Ultra Filtration Units\*.



## PRODUCT INFORMATION SHEET

TROY MERGAL® K9N, EPA REG. NO. 5383-103

This document must accompany each shipment of TROY MERGAL® K9N

### DIRECTIONS FOR USE

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

**\*Brewery Pasteurizer and Can Warmer Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N to 1000 gallons of water in the system weekly or as needed to maintain control of bacteria, fungi and algae. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water may be needed depending on the severity of the fouling.

**\*Conveyor Lubricants:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in the manufacture and use of water-based conveyor lubricants. TROY MERGAL K9N should be dispensed into the conveyor lubricant concentrate and uniformly dispersed throughout the fluid or dispensed into the conveyor lubricant use- dilution feed line using a metering pump and uniformly sprayed onto the conveyor. TROY MERGAL K9N should be added to the conveyor lubricant concentrate at a level to ensure that the final use-dilution shall contain 200-1,000 ppm of TROY MERGAL K9N (3 -15 ppm active ingredient). Grossly contaminated systems must be cleared before treatment is begun.

**Initial Dose:** For a noticeably fouled system, meter in 8.3 pounds (126 fluid ounces) of TROY MERGAL K9N per 1,000 gallons of use-dilution conveyor lubricant. If necessary, continue metering 3.3-8.3 pounds (50-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant until control is achieved and only to maintain the level of TROY MERGAL K9N in the final use-dilution fluid at 400 – 1,000 ppm (6-15 ppm active ingredient).

**Subsequent Dose:** After establishing microbial control or to prevent fouling of a clean system, maintain the system at 3-15 ppm active ingredient by metering 1.7-8.3 pounds (26-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant.

**\*Industrial Process Water:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae in industrial process water systems including Retort Water Systems, Industrial Scrubbing Systems, Evaporative Condenser Water Systems, Hydrostatic Sterilizer Water Systems, and Coal Slurry Systems. It should be added at a point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water. Repeat if necessary to achieve control.

**\*Ultra Filtration Units, such as Reverse Osmosis Membranes:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in ultra filtration units, such as reverse osmosis membranes. Add 10 to 333 ppm of TROY MERGAL K9N (0.15 to 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis membranes by either continuous feed or periodic injection. Compatibility of TROY MERGAL K9N with reverse osmosis membranes should be confirmed with membrane manufacturers. For the control of bacteria and fungi in carbon beds, add 10 to 333 ppm of TROY MERGAL K9N (0.15-5 ppm active ingredient). For periodic membrane cleaning, add 0.4 – 1.0 lb. of TROY MERGAL K9N to every 120 gallons of cleaning solution (6 – 15 ppm active ingredient). Badly fouled systems should be cleaned before treatment is begun.

#### SUPPLEMENTAL DOSING:

Depending on the nature/severity of the contamination, if analysis indicates a loss of active ingredient(s) and further microbial control is necessary, product may be dosed with additional [Insert Product Name] microbiocide at a level to ensure that the final use-dilution product will not exceed the maximum concentration indicated (max dosage level ppm Insert Product Name).

[\*Not registered for use in the State of California]

**TROY CHEMICAL CORPORATION**

**One Avenue L**

**Newark, N.J. 07105**

## MASTER LABEL – Sub-label D

Industrial Microbiocide for Adhesives, Air Washer Systems\*, Building Materials, Brewery Pasteurizer and Can Warmer Systems\*, Concrete Admixes, Conveyor Lubricants\*, Emulsions, Foam Control Products\*, Industrial Process Water Systems\*, Pigment Dispersions, Paints and Coatings, Metal Working, Hydraulic Fluids\*, Oil Field Injection Waters\*, Fuels\*, Recirculating Water Cooling Towers\* and Closed Loop Water Systems\* and Ultra Filtration Units\*.] and for Household, Industrial and Janitorial Cleaning Products Including Floor Cleaners, Waxes, Polishes, and Surface Cleaners, Shampoos and Pre-spotters Laundry Additives including Liquid Laundry Detergents, Fabric Softeners, Silicone Emulsions and \*Surfactants and Stain Removers.

### DIRECTIONS FOR USE

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

***Do not apply this product in a way that will contact workers or other persons.***

Troy Mergal K9N is a microbiocide that is effective against bacteria, yeast and mold.

It is best if Troy Mergal K9N is added to the initial phase of production; however, if excessive temperatures or pH values occur, addition at the end of the manufacturing process is recommended.

**For Household Industrial and Janitorial products** use 0.05-0.15% (0.5-1.5 pounds per 1000 lbs. of product.

Troy Mergal K9N is used as an industrial microbiocide for **adhesives, building materials, pigment dispersions, emulsions, paints and coatings.**

Troy Mergal K9N is used to control bacteria and fungi in dispersed pigments such as kaolin clay, montmorillite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, and magnesium silicate used in paint and paper production. Typical emulsions include printing components (inks, resins, waxes, and surfactants). Building materials include mastics, caulks, joint cements, spackling, plasters and stuccos. Use as an in-can preservative in paints and coatings.

It is best if Troy Mergal K9N is added to the initial phase of production; however, if excessive temperatures or pH values occur, addition at the end of the manufacturing process is recommended.

Typical usage rates are 0.05-0.40% (0.05-0.40 lbs. per 100 lbs of formulation) based on the total weight of the formulation.

***Do not apply this product in a way that will contact workers or other persons.***

For the control of slime-forming and sulfate reducing bacteria in **oil and gas field systems\***, including **enhanced recovery injection fluids\*, drilling\*, fracturing\* and completion fluids\***, slug treat with 7-36 ppm depending on the severity of contamination. This product may be used for terrestrial and off-shore oil drilling muds and packer fluids. **Initial Dose:** Add 14-28 ppm (0.57– 1.2 gallon or 6.2 -12.5 pounds Troy Mergal K9N per 1000 barrels of water) at a point in the system where it will be uniformly mixed. Repeat treatment after three days or as needed until control is achieved. **Subsequent dose:** Add 5.5-14 ppm (0.22-1.2 gallon or 2.4-6.2 pounds Troy Mergal K9N per 1000 barrels of water) every 7 days or as needed to maintain control. [\*Not registered for use in the State of California]

\*For Fuel Preservation, ***See accompanying product information sheet for full description of rates and directions for use.***

For Air Washer Systems\*, Brewery Pasteurizer and Can Warmer Systems\*, Conveyor Lubricants\*, Foam Control Products\*, Industrial Process Water Systems\*, Metal Working and Hydraulic Fluids\*, Recirculating Water Cooling Towers\* and Closed Loop Water Systems\* and Ultra Filtration Units\*, ***See accompanying product information sheet for full description of rates and directions for use.***

[\*Not registered for use in the State of California]



## PRODUCT INFORMATION SHEET

TROY MERGAL® K9N, EPA REG. NO. 5383-103

This document must accompany each shipment of TROY MERGAL® K9N

### DIRECTIONS FOR USE

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

**\*Air Washer Systems:** For use only in industrial air washing systems that maintain effective mist eliminating components. Add 0.3 to 7.5 lb. of TROY MERGAL K9N to 1000 gallons of water (35 to 886 ppm TROY MERGAL K9N) in the air washer sump, or chill water sump to ensure uniform mixing, for the control of bacteria, fungi and algae. A repeat treatment may be needed depending on the severity of contamination.

**\*Brewery Pasteurizer and Can Warmer Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N to 1000 gallons of water in the system weekly or as needed to maintain control of bacteria, fungi and algae. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water may be needed depending on the severity of the fouling.

**\*Conveyor Lubricants:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in the manufacture and use of water-based conveyor lubricants. TROY MERGAL K9N should be dispensed into the conveyor lubricant concentrate and uniformly dispersed throughout the fluid or dispensed into the conveyor lubricant use- dilution feed line using a metering pump and uniformly sprayed onto the conveyor. TROY MERGAL K9N should be added to the conveyor lubricant concentrate at a level to ensure that the final use-dilution shall contain 200-1,000 ppm of TROY MERGAL K9N (3 -15 ppm active ingredient). Grossly contaminated systems must be cleared before treatment is begun.

**Initial Dose:** For a noticeably fouled system, meter in 8.3 pounds (126 fluid ounces) of TROY MERGAL K9N per 1,000 gallons of use-dilution conveyor lubricant. If necessary, continue metering 3.3-8.3 pounds (50-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant until control is achieved and only to maintain the level of TROY MERGAL K9N in the final use-dilution fluid at 400 – 1,000 ppm (6-15 ppm active ingredient).

**Subsequent Dose:** After establishing microbial control or to prevent fouling of a clean system, maintain the system at 3-15 ppm active ingredient by metering 1.7-8.3 pounds (26-126 ounces) of TROY MERGAL K9N per 1,000 gallons of conveyor lubricant.

**\*Preservative for Foam Control Products:** TROY MERGAL K9N is recommended as an in-container preservative for the control of bacteria and fungi in foam control products. Add 0.5 to 3.3 lb (227 g to 1.5 kg) of TROY MERGAL K9N to each 1,000 lb. (454 kg) of aqueous product to provide 7 ppm to 50 ppm active isothiazolinones.

**\*Industrial Process Water:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae in industrial process water systems including Retort Water Systems, Industrial Scrubbing Systems, Evaporative Condenser Water Systems, Hydrostatic Sterilizer Water Systems, and Coal Slurry Systems. It should be added at a point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb of TROY MERGAL K9N per 1000 gallons of water. Repeat if necessary to achieve control.

**Metalworking Fluids:** Recommended for the maintenance and control of bacteria in soluble and emulsifiable-type aqueous metalworking fluids.

**Maintenance:** For non-fouled systems use TROY MERGAL K9N at 32 fluid ounces per 1000 gallon of emulsion (2 pound) every 4 weeks or 32-148 fluid ounces per 1000 gallon of emulsion (2-10 pound) every 8-12 weeks. This corresponds to 250-1,167 ppm TROY MERGAL K9N (3.84-17.5 ppm active ingredient).

For fouled systems use an initial dose of 64-148 fluid ounces per 1000 gallon emulsion (4-10 pound) to be followed by subsequent maintenance dosages depending on the treatment interval already referenced. This corresponds to 500-1,167 ppm TROY MERGAL K9N or 7.5-17.5 ppm active ingredient.

The preservative should be dispensed into the use-dilution of the metalworking fluid using a metering pump and uniformly dispersed throughout the system.



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**\*Hydraulic Fluids:** Recommended for the manufacture and use of high 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.

**Maintenance:** For non-fouled systems use TROY MERGAL K9N at 110-135 fluid ounces (7.2-8.8 pound) per 1000 gallon fluid every 8 weeks. This corresponds to 980-1,200 ppm TROY MERGAL K9N or 15-18 ppm active ingredient.

For fouled systems use an initial dose of 35-235 fluid ounces (8.8-15.4 pound) per 1000 gallon fluid to be followed by subsequent maintenance dosages. This corresponds to 1,200-2,100 ppm TROY MERGAL K9N or (18-32 ppm active ingredient).

The preservative should be dispensed into the use-dilution of the hydraulic fluid using a metering pump and uniformly dispersed throughout the system.

### \*FUEL PRESERVATIVE

Recommended for the control of bacteria and fungi in crude oils, aviation fluids, kerosene, heating oils, residual fuel oils, coal slurries, liquefied petroleum gases, petrochemical feedstocks, diesel fuels and gasoline.

Dispense TROY MERGAL K9N directly into a fuel tank, storage tank, or flowing stream of fuel in a manner to ensure uniform distribution. Add TROY MERGAL K9N at 100-400 ppm (v/v) volume to volume of fluid. Repeat as necessary to maintain system.

**For aviation fuels, consult the FAA to determine acceptability prior to use in engines and/or aircraft.**

**\*Industrial Recirculating Closed Loop Water Cooling Systems:** Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water in the system weekly to maintain control of bacteria, fungi and algae in the reservoir, recirculating line or some other point to ensure uniform mixing. For noticeably fouled systems, an initial treatment with 1.25 to 7.5 lb of TROY MERGAL K9N per 1,000 gallons of water may be needed depending on the severity of the fouling.

**\*Industrial Recirculating Water Cooling Towers:** TROY MERGAL K9N is recommended for the control of bacteria, fungi and algae. It should be added to the tower basin or some other point to ensure uniform mixing. Add 0.3 to 1.86 lb. of TROY MERGAL K9N per 1,000 gallons of water (35 to 220 ppm TROY MERGAL K9N) weekly as needed for maintenance. For noticeably fouled systems, use an initial dose of 1.25 to 7.5 lb. of TROY MERGAL K9N per 1,000 gallons of water. Repeat if necessary to achieve control.

**\*Ultra Filtration Units, such as Reverse Osmosis Membranes:** TROY MERGAL K9N is recommended for the control of bacteria and fungi in ultra filtration units, such as reverse osmosis membranes. Add 10 to 333 ppm of TROY MERGAL K9N (0.15 to 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis membranes by either continuous feed or periodic injection. Compatibility of TROY MERGAL K9N with reverse osmosis membranes should be confirmed with membrane manufacturers. For the control of bacteria and fungi in carbon beds, add 10 to 333 ppm of TROY MERGAL K9N (0.15-5 ppm active ingredient). For periodic membrane cleaning, add 0.4 – 1.0 lb. of TROY MERGAL K9N to every 120 gallons of cleaning solution (6 – 15 ppm active ingredient). Badly fouled systems should be cleaned before treatment is begun.

### SUPPLEMENTAL DOSING:

Depending on the nature/severity of the contamination, if analysis indicates a loss of active ingredient(s) and further microbial control is necessary, product may be dosed with additional [Insert Product Name] microbiocide at a level to ensure that the final use-dilution product will not exceed the maximum concentration indicated (max dosage level ppm Insert Product Name).

[\*Not registered for use in the State of California]

**TROY CHEMICAL CORPORATION**

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