FORMULA 312

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. May be fatal if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic attacks and symptoms in hyper-sensitive individuals.

Do not get in eyes, on skin, or clothing. Avoid breathing vapor. Do not swallow. Wear goggles, protective clothing, and butyl or nitrile gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not dislodge 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 dislodge 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 HANDLING

FORMULA 312 is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. FORMULA 312 can be stored and handled in bonded phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-lined equipment. This product freezes at about 11° F (-11°C). Therefore, unless the storage tank is inside or underground, heating and insulations may be required. If heating is needed, exposure to high temperatures should be avoided. For short storage times (up to about 1 month), temperatures of up to 100° F (37.8°C) can be tolerated but the preferred maximum storage temperature is about 80° F (26.7°C).

A stainless steel centrifugal pump is suggested for transfer service. Spiral-wound stainless steel with TEFLON® Polymer is suitable for gaskets and packing.

Handline in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (NIOSH/OSHA approved air-purifying respirator equipped with an organic vapor cartridge) may be required.

BEFORE HANDLING OR USING THIS PRODUCT, SEE YOUR EMPLOYER AND READ CURRENT MATERIAL SAFETY DATA SHEET

EPA REG. NO. 464-692-8540
EPA EST. NO. 856-GA-1

SOLD BY: GARRATT-CALLAHAN COMPANY

PRODUCT NO. 091861
NET WEIGHT 46 LBS. (4.3 GAL)

PRECAUTIONARY STATEMENTS

FIRST AID

IF SWALLOWED
- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting.
- Do not give anything to drink.

IF IN EYES
- Wash immediately and continuously with flowing water for at least 20 minutes.
- Remove contact lenses after the first 5 minutes and continue washing.
- Consult a physician or doctor immediately for treatment advice.

IF ON SKIN OR CLOTHING
- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-30 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 by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

NOTE TO PHYSICIAN: Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

IN CASE OF AN EMERGENCY endangering life or property involving this product, call CHEMTREC at 1-800-248-0808 or Rocky Mountain Poison Center Central at 1-800-222-1222.

5/30/2011

GARRETT-CALLAHAN COMPANY

PLANTS: Addison, IL Atlanta, GA Edison, NJ Dallas, TX Burlington, CA

www.g-c.com

STORAGE AND DISPOSAL

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. 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 your 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. Triple or pressure dose (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities.

DIRECTIONS FOR USE

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

AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/DEGASIFICATION COOLING AND PROCESS WATER SYSTEMS

This product may be used only in industrial air washers and air washer systems which have diluting components. FORMULA 312 should be added at the application rate described below to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSES) or continuously. Badly fouled systems can be shock treated with FORMULA 312. Under these conditions, blowdowns should be discontinued for up to 24 hours. FORMULA 312 can be used in industrial process water systems that contain ultra filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

INTERMITTENT (SLUG DOSES) METHO

Initial Dose: When the system is noticeably fouled, apply 12.7 to 25.4 fluid ounces of FORMULA 312 per 1,000 gallons of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 6.3 to 12.7 fluid ounces of FORMULA 312 per 1,000 gallons of water in the system weekly, or as needed to maintain control. Badly fouled systems must be cleaned before treatment begins.
FORMULA 312

CONTINUOUS FEED METHOD
Initial Dose: When the system is noticeably contaminated, add 2.1 to 16.2 fluid ounces (223 to 500 ppm product) of FORMULA 312 per ton or 200 to 600 mL/minute of FORMULA 312 per metric ton of solids added per minute in the system via a metering pump or suitable насосное оборудование.

Subsequent Dose: When microbial control is evident, add 0.3 to 2.3 lbs of FORMULA 312 per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavy fouled systems should be bailed out prior to initial treatment.

Subsequent Dose: When microbial control is evident, add 0.3 to 2.3 lbs of FORMULA 312 per ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

PIGMENTS AND PAPER SLURRIES FOR PAPER AND PAPERBOARD
Use from 0.11 to 0.7 lbs of FORMULA 312 per 1,000 lbs of dry paper to produce a concentration from 111 to 671 ppm as product (based on slurry solids) in the mixed slurry.

WATER BASED COATINGS FOR PAPER AND PAPERBOARD
Note: For use on non-food contact coatings only. Use from 0.11 to 0.7 lbs of FORMULA 312 per 1,000 lbs of dry paper to produce a concentration from 111 to 671 ppm as product (based on slurry solids) in the mixed slurry.

AQUEOUS METALWORKING FLUIDS
FORMULA 312 should be added to a metalworking fluid system at a point of uniform mixing such as the fluid collection tank. Additions may be made intermittently (SLUG DOSE) or continuously.

INTERMITTENT (SLUG DOSE) METHOD
Initial Dose: When the system is noticeably contaminated, add 6.1 to 16.2 fluid ounces (223 to 500 ppm product) of FORMULA 312 per ton or 200 to 600 mL of FORMULA 312 per metric ton of solids added as a slug dose. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 0.3 to 5.1 fluid ounces (22 to 350 ppm) of FORMULA 312 per ton or 30 to 500 mL of FORMULA 312 per metric ton of solids added in the system as a slug dose as necessary to maintain control. The total should not exceed 115 gallons per 1,000 tons of solids added per day.

WATER BASED CONVEYOR LUBRICANTS
(Bronze, Juice, Dairy, Beverage, and Food Processing Systems)
Avoid contamination of food is application of product.

Thoroughly clean all tanks and conveyors to remove gross soil. Rinse well. Use an automatic feed system as recommended by your Garrett/Callahan representative to provide 1.3 to 7.6 fluid ounces (60 to 300 ppm active) of FORMULA 312 per 100 gallons of dilution for lubricant.

GENERAL PRESERVATIVE USE
FORMULA 312 is recommended for use in aqueous or water containing products and systems, including industrial, institutional and consumer in-scan processes and products, to control the growth of bacteria and fungi. For effective preservation, add FORMULA 312 to the product formulation at a rate of 0.022% to 0.22% (225.5 to 2,253.5 ppm) based on the water content of the product (0.22 to 2.2 lbs FORMULA 312 per 1,000 lbs water content).

Mix uniformly.

PRESERVATIVE FOR CONCENTRATES
For use on concentrates where effective preservation is needed after dilution, add FORMULA 312 to the product formulation at a rate such that the diluted end-use product will contain 0.022% to 0.22% FORMULA 312. At no time during the preservation process should the level of FORMULA 312 exceed 2.2%.

REVERSE OSMOSIS MEMBRANES
For effective preservation of reverse osmosis elements (where approved for compatibility by membrane manufacturer), immerge elements in a tank containing 0.2% to 2.2% FORMULA 312. FORMULA 312 can also be added to in-line recirculating systems for preservation of installed dial-oxide reverse osmosis equipment (where approved for compatibility by membrane manufacturer). Add 0.22% to 2.2% FORMULA 312 to the tank in the circulating system. Maintain the concentration of FORMULA 312 by periodic addition to counteract any system leakage.

CONCRETE ADHESIVES
For effective preservation of concrete admixtures, add FORMULA 212 to the product formulation at a rate of 2.222 to 6.089 ppm based on the weight of the admixture (2.2 to 8.8 lbs FORMULA 312 per 1,000 lbs concrete admixture). Mix uniformly.

LIMITED WARRANTY AND DISCLAIMER
Seller warrants that the product conforms to its chemical description as contained on this label and is reasonably fit for the purposes stated on this label when used in accordance with directions under normal conditions of use.

THE WARRANTIES MADE IN THIS PARAGRAPH ARE SELLER'S SOLE WARRANTIES WITH RESPECT TO THE PRODUCT AND ARE MADE EXPRESSLY IN LIEU OF AND EXCLUDE ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES.

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