SUPPLEMENTAL LABELING

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OLIN
DRY CHLORINATING COMPOUND
OCI™- 56-I
GRANULAR

FOR INDUSTRIAL USE

Active Ingredient...Sodium Dichloro-s-Triazinetrione Dihydrate.....99%

Inert Ingredients..... 1%

Available Chlorine..... .....55%

EPA Reg. No. 1258-1065

Directions for use in Sewage Treatment Plants: It is a violation of federal law to use this product in a manner inconsistent with its labeling.

1. Disinfection of Effluents

Problem

The disinfection of sewage requires that disease producing organisms in raw or treated sewage be destroyed. Disinfection is necessary to protect receiving water which may subsequently be used for water supplies, bathing places, or shellfish production. The proper disinfection of sewage is recognized as necessary for the protection of public health and because of this, the problems involved in treating sewage effluents is acute for many smaller communities.

Treatment

Disinfection by chlorination or hypochlorination does not occur instantaneously. A suitable detention basin must be provided to expose the sewage effluent to the effects of OCI™-56-I for a sufficient period of time (usually a minimum of 15 minutes). Where mechanical stirring or other agitiation is not present, chlorination for disinfection should be introduced before primary or secondary sedimentation treatments, if these are used.

The amount of OCI™-56-I solution required will vary, depending on the concentration and conditions of the final effluent. The sewage should be treated before it has reached a septic state. Experiments indicate that about 30% of the chlorine demand of raw sewage is attributable to settled solids; 40% to suspended and colloidal solids; and 30% to dissolved solids.

Whenever possible, disinfection should be controlled by laboratory checks. Disinfection can be achieved when the chlorine residual (after 15-30 minutes contact time) is between 0.6 and 1.0 ppm. Experience with different types of treated sewage will generally establish a relationship between the residual chlorine content of the final effluent and the contact time necessary to insure the desired bacteriological results, after which the residual chlorine and time of contact may be made the controlling factors for operation. Occasional bacteriological checks should be practiced as a safeguard.

Hypochlorinators used to treat sewage in small communities should always be located near the influent of the detention basin. To conform with the requirements mentioned above, the feed rate must be adjusted to the higher dosages usually required for sewage practices. In cases where sewage is to be temporarily disinfected before being diluted in a body of water, the following conditions will usually provide satisfactory protection against pollution of receiving waters: (a) Raw sewage, 10-30 ppm available chlorine. (b) Primary treated sewage, 5-20 ppm available chlorine. (c) Sewage which has undergone primary and secondary treatment, or secondary alone, 2-5 ppm. Bacteriological tests should be made frequently as a safeguard. The available chlorine level in the discharged effluent should be between 0.6 and 1.0 ppm or in accordance with an NPDES permit. For guidance, contact the regional office of EPA.

2. Slime Control

Problem

Slime is a major cause of trouble in treatment plants and in the sewage system. When not controlled, slime may clog sewage conduits, restrict waterways, form unsightly growths, and even cause sludge bulking in the activated sludge process. Slime may also infest low rate trickling filters and cause ponding of the filters.

Treatment

When ponding of the filters is excessive, stoppage of the distributing filter can occur. The continual feeding of an OCI™-56-I solution into the effluent at a point above the filter nozzles will clean the filter satisfactorily. Dosages will depend on the amount of excess slime accumulated on the nozzles and filter store. Extreme cases may require dosages as high as 10 ppm available chlorine.

Once the desired cleaning has been achieved, an intermittent application of OCI™-56-I solution to the dosing tanks, just ahead of the filter, is usually successful. The amount and frequency of the dosage needed to give satisfactory continuous operation of the trickling filters depends on the severity of the microbiological problem.

In activated sludge plants, "bulkling sludge" can be caused by the presence of slime which interrupts proper settling. A solution of OCI™-56-I introduced at some point on the return sludge line can be an effective control measure. Normal dosage rates are 2-8 ppm available chlorine.

3. B.O.D. Reduction

Problem

The Biochemical Oxygen Demand (B.O.D.) of sewage or industrial waste refers to the amount of oxygen (in ppm) required during the stabilization of the decomposable organic matter by oxygen-consuming bacterial action. The discharge of high B.O.D. sewage effluents into streams often created the problem of odor nuisances, unsightly appearance, and death to aquatic life.

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Treatment

The condition can usually be avoided by applying a solution of OCI™-56-I to the effluent until a substantial residual is obtained. Application should be made at a point which will permit a 10-20 minute contact time prior to the discharge of the effluent into the stream. A dosage which leaves a residual available chlorine of about 0.2 ppm after a contact time of at least 10 minutes, will afford a reduction of about 1/3 of the effluent's B.O.D. Where more permanent or great B.O.D. reduction is necessary, dosing to higher available chlorine residuals is recommended.

4. Coagulation and Sedimentation

A great deal of the finer divided suspended matter and most of the colloidal matter in sewage does not readily respond to plain sedimentation. The job of removing substantial portions of this kind of matter is usually accomplished either by chemical precipitation, by filtration, or by the use of both processes.

Treatment

Research has proven that pre-hypochlorination will improve sedimentation and coagulation in sewage treatment operations.

Directions for use in controlling the growth of bacteria and algae in industrial recirculating water cooling towers, air washers, and evaporative condensers: It is a violation of federal law to use this product in a manner inconsistent with its labeling.

Industrial Recirculating Cooling Water Towers and Evaporative Condensers

BADLY FOULED SYSTEMS should be cleaned prior to initiating treatment.

1. Initial Dosage - When the system is just noticeably fouled, add 0.65-0.8 lbs. of OCI™-56-I per 10,000 gallons of water contained in the system. Repeat this dosage if necessary until a free available chlorine level (FAC) of 0.5-1.0 ppm is obtained (as determined by use of a reliable test kit).

2. Maintenance Dosage - To maintain a FAC of 0.5-1.0 ppm, add 1.3-2.6 oz. of OCI™-56-I per 10,000 gallons of water, daily or as needed.

3. OCI™-56-I should be added to the system at a point where adequate flow is maintained. Variations in water temperature, chlorine demand and flow rate will affect the dissolution rate. Warmer seasons may require an upward adjustment of the FAC.

Air Washers

For use only in industrial air washer systems that maintain effective mist eliminating components. OCI™-56-I controls slime forming bacteria and fungi in air washer systems. This product may be added to the system either continuously or intermittently or as needed. The frequency of feeding and duration of the treatment will depend on the severity of the problem.

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KEEP OUT OF REACH OF CHILDREN

DANGER!

SEE PRINCIPAL LABEL FOR COMPLETE PRECAUTIONARY INFORMATION AND STORAGE AND HANDLING INSTRUCTIONS

All applicable directions, restrictions, and precautions on the EPA principal registered label are to be followed.

OLIN CHEMICALS
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