



Wastewater Treatment System Fact Sheet

Wastewater Treatment System Chemicals

Warning: Not All Chlorine Tablets are Created Equal

Wastewater from your onsite treatment system must be disinfected before it is sprayed onto lawns. Disinfection prevents odors and removes disease-causing microorganisms. The most common form of disinfection for onsite wastewater treatment systems is tablet chlorination.

Currently, there are two main types of chlorine tablets found on the market—**calcium hypochlorite** and **chlorinated isocyanurates**.

Only use chlorine tablets that are made from calcium hypochlorite, a common household bleach, in your wastewater treatment system.

Calcium hypochlorite tablets are the only readily available EPA-approved product for wastewater disinfection. They are very reactive and quickly kill 99% of bacteria present in wastewater within ten minutes! Just as important, the residual chlorine dissipates rapidly so it will not damage the receiving environment.

Do not use swimming pool chlorine tablets made from trichloroisocyanuric acid in your wastewater treatment system.

Chlorinated isocyanurates, commonly referred to as swimming

pool tablets, are formulated for swimming pool disinfection only. It is both illegal and dangerous to use this type of chlorine tablet in wastewater treatment systems. Tri-Chlor tablets dissolve more slowly than calcium hypochlorite, do not thoroughly disinfect the effluent, and the residual chlorine remains for long periods of time to damage the receiving environment. These tablets work well in swimming pools where clean water is continually recirculated and slow dissipation of residual chlorine is desired.

Additionally, a danger of explosion may arise due to the accumulation of moisture within the tablet. Trichloroisocyanuric tablets are designed to be totally immersed in water. However, when used in wastewater treatment systems they are exposed to periodic flows which causes them to decompose and release an explosive gas called nitrogen chloride.

Combining trichloroisocyanuric acid tablets with calcium hypochlorite tablets will also form the explosive compound, nitrogen chloride. These explosions can cause extensive property damage and serious injury.

Chlorine tablets are caustic and must be handled with care. Wear gloves to prevent direct contact with your skin. Use additional caution if the tablets are moist, as that is when they are most caustic.

Also, make sure to open the tablet container in a well-ventilated area because chlorine gas builds up in the container. Chlorine gas can escape from the tablets and the container, reducing their effectiveness and possibly corroding metal items stored near the container.

Remember, every manufactured chemical is formulated for a specific use. If you use the wrong chemical for the wrong use, you are risking environmental damage, legal problems, and serious personal injury.