

# Septic System Information

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## for Rhode Islanders

### SEPTIC SYSTEM ADDITIVES

With over 1200 products currently on the market, many homeowners have concerns and questions regarding septic tank additives. The position of URI Cooperative Extension's On-site Wastewater Training Center is that additives are not necessarily beneficial to septic tanks and may, in fact, be harmful. Instead of spending money on additives, we recommend that you use the money for regular septic system inspection and maintenance (the real solution to extending the life of your septic system). Here's why:

RI regulation prohibits "the use of acid and organic chemical solvents in any individual sewage disposal system"

(RI ISDS Regulation SD 2.12). Acids and other chemical additives can destroy the biological function of the septic tank, re-suspend solids causing drainfield clogging, damage soil structure, and can contaminate groundwater. Acids and base materials corrode concrete tanks and distribution boxes, causing them to leak and fall apart.

Biological additives are not necessary and may reduce system life by allowing solids to move from the tank and clog your drainfield. Some manufacturers claim that such additives enhance biological treatment, reduce or eliminate pumping by liquefying solids and grease, and provide a head start with bacteria or enzymes when the system is stressed, new, or recently pumped. These claims are not supported by research.

A properly functioning septic tank retains solids.

Solids slowly decompose and accumulate. Eighty percent of solids decompose to liquid or gas. Twenty percent accumulate in the tank. As solids build up within the septic tank, eventually, they must be pumped out. The nature of a properly functioning septic tank necessitates periodic maintenance pumping. How often you need to pump depends on the type of system, its use, and inspection findings. Using additives to avoid pumping may cause bigger problems by allowing solids to flow into and clog the drainfield.

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For More Information: Technical Assistance, training programs and information. URI Cooperative Extension's On-Site Wastewater Training Center George Loomis, Program Director, (401) 874-4558, [gloomis@uri.edu](mailto:gloomis@uri.edu) David Dow, Program Manager, (401) 874-5950, [dbdow@uri.edu](mailto:dbdow@uri.edu) Website: [www.uri.edu/ce/wq](http://www.uri.edu/ce/wq)

The amount of bacteria or enzyme in each dose of additive is very small compared to the bacteria already in the tank or introduced with the first flush of human waste (in the case of a new system). Thus its effectiveness is slight or undetectable. No manufacturer has submitted evidence that these minute doses can benefit septic tanks.

Excessive use of cleaning agents can stress your system by killing beneficial bacteria,

though it will recover rapidly under normal use. Always follow the manufacturer's recommendations when using cleaning products. A University of Arkansas study determined that a high dose of cleaning agents (i.e. 1.3 gallons of bleach), killed the beneficial bacteria in the tank, but within 3 days the bacteria were back to normal amounts. These doses are obviously higher than any normal use would require and are not recommended.



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