

Proper Disposal of LD Disinfectant and Exspor Disinfectant-Sterilant (Alcide Corp) (8/00)

DIS recently received a question from Wright Patterson AFB about the proper method for disposing of used LD Disinfectant (10:1:1 concentration) from the Alcide Corporation. The question arose because of a conflict between disposal instructions on the LD container and those provided on the product's Material Safety Data Sheet (the MSDS). The container instructions state that LD may be disposed of in a sanitary sewer, while the MSDS mandates that it be disposed of as a hazardous waste and sent to a Resource Conservation and Recovery Act (RCRA)-approved incinerator or waste facility. To clarify the issue, DIS contacted the Alcide Corporation and asked for guidance. Cecilia Morse, Alcide's Regulatory Affairs Associate, responded to our inquiry and provided the following instructions in a letter dated 4 January 2000.

1. If the solution is to be disposed of without further treatment prior to disposal, it should be disposed of as hazardous waste and sent to an RCRA-approved incinerator or waste facility.
2. If the solution is treated properly, it can be poured down the drain. Proper treatment is listed below for the LD Base Concentrate, the LD Activator Concentrate, and the mixed LD solution. Be aware, however, that the treated solution must always meet the discharge requirements of your local water district (e.g., temperature range, pH range, particle size), and you must verify that it meets those requirements prior to discharge.

LD Base Concentrate: Carefully add LD Activator Concentrate and mix together to lower the pH from 12 to below the upper pH limit locally required for discharge. The acceptable range for discharge is typically from 5 to 9. The pH should ideally be adjusted to a value of 7 to 9. You can then flush the solution down the drain using at least 10 parts of water to each part of neutralized Base Concentrate.

LD Activator Concentrate: Carefully add sodium bicarbonate (baking soda) and mix to adjust the pH to meet local discharge requirements. This is typically a pH of 5 to 9. You can then flush the solution down the drain using at least 10 parts of water to each part of neutralized Activator Concentrate.

LD Disinfectant: Carefully add sodium bicarbonate (baking soda) and mix to adjust the pH to meet local discharge requirements (typically a pH of 5 to 9). You can then flush the liquid down the drain using at least 10 parts of water to each part of neutralized solution.

The Alcide Corporation also makes Exspor Sterilant-Disinfectant (4:1:1 concentration). The treatment regimen for it is the same as described for LD Disinfectant.

DIS does not recommend one specific brand of disinfectant for clinic or laboratory use. If you currently use LD or Exspor and find these disposal requirements burdensome, note that there are alternative disinfectants on the market. Only a few products, however, have relatively short contact times similar to that of LD and Exspor (i.e., 3 minutes). Among the alternatives are the following:

Disinfectant	Manufacturer	Type	Contact Time
Dispatch	Caltech (800) 234-7700 www.caltechind.com	Sodium hypochlorite	2 minutes
Microstat 2	Septodont (800) 872-8305	Sodium bromide and chlorine	5 minutes
ProSpray	Cottrell (800) 843-3343 (303) 799-9408	Synthetic phenolic	10 minutes
Birex _{se}	Biotrol (800) 822-8550 (303) 673-0341 www.biotrol.com	Synthetic phenolic	10 minutes
Tri-Cide	Health-Sonics (800) 342-3096	Synthetic phenolic	10 minutes