



Glutaraldehyde & OPA Sterilant Disposal

CITY OF PHOENIX

WATER SERVICES DEPARTMENT

ENVIRONMENTAL SERVICES DIVISION

(602) 262-1859

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Glutaraldehyde and ortho-phthalaldehyde (OPA) present health, safety, environmental, and legal concerns when handled and disposed incorrectly.

Glutaraldehyde and OPA are used as high-level cold disinfectants where moisture and heat would damage sensitive medical instruments in many departments such as gastroenterology, urology, and cardiology to x-ray, laboratory, and pharmacy. Glutaraldehyde and OPA are typically used in a manual soaking container or more often in automated endoscopic reprocessors (AERs) which are often plumbed to a drain resulting in used chemical dumped directly into the sewer system without first deactivating it. However, dangerous vapor can easily rise up from the drain.

Disposal of Glutaraldehyde and Ortho-Phthalaldehyde (OPA)

Spent glutaraldehyde and OPA when discarded are hazardous wastes, and care should be taken when disposing of this material to ensure that human health and the environment are protected.

There are **glycine-based products** commercially available which will neutralize glutaraldehyde and OPA and make them non-hazardous wastes; this is the approved treatment method. This method of neutralization renders the solution pH-neutral. Sodium bisulfate is very effective at neutralizing glutaraldehyde and OPA, but it creates a new compound that is toxic. It is also a common practice to pour neutralizer directly into an AER reservoir prior to disposal; this is an unsafe practice. Sterilant should be pumped into a separate holding tank where it can be mixed with neutralizer prior to disposal.

For personal safety, ensure that you comply with procedures and safety information included with the instructions for all neutralizing products.

Disposal Options

- Hire a professional hazardous waste contractor to assist with disposal of glutaraldehyde and OPA.
- **NEVER** dilute solutions of glutaraldehyde or OPA using water as a substitute for treatment or neutralization with the intent of drain disposal. Dilution with water is prohibited.
- **NEVER** dispose of glutaraldehyde and OPA down the drain without neutralizing it, and **Do NOT** pour neutralized glutaraldehyde and OPA down the drain without prior authorization from the local Publicly Owned Treatment Works (POTW). Glutaraldehyde and OPA are biocides which could harm the "good" bacteria in the wastewater treatment plant (WWTP). Contact your local POTW to discuss compatibility with the WWTP.
- Neutralization of glutaraldehyde and OPA for discharge to sewer falls under hazardous waste rules of "treatment by generator." As such, Federal, State, and Local laws all require documentation of onsite hazardous waste treatment via use of a **Chemical Waste Treatment Log**. This log is a record of chemical waste treatment and it must be kept onsite for a minimum of three (3) years.