UNIVERSITY OF NEBRASKA MEDICAL CENTER℠
ENVIRONMENTAL HEALTH AND SAFETY

HAZARDOUS MATERIAL FACT SHEET
High Level Disinfection (HLD) Chemical Disposal

Purpose

To provide a safe method for the deactivation and disposal of used, unwanted, or expired chemicals used in high-level disinfection (HLD). HLD chemicals are used in manual processes (bath/tabletop soaking of instruments) and automated reprocessors.

Expired & Unwanted HLD Chemicals

There are two options for the disposal of expired and unwanted HLD chemicals. They include:

1. Submit a chemical waste pick-up request to the UNMC Environmental Health and Safety (EHS) Department. Please review the Chemical Disposal Fact Sheet for additional guidance.
2. Dispose of HLD chemicals down the drain (sanitary sewer) after adding the appropriate neutralizer to the disinfectant and the pH level is between 5-9. Please reference the manufacturer's Safety Data Sheet (SDS) and the disposal procedures outlined in the following sections.

Note: Adding sodium bicarbonate (baking soda) to full containers of HLDs can cause bubbling which may overflow. To minimize spillage, it is recommended to place the container into secondary containment and add the neutralizer incrementally (about ¼ of the desired quantity) every 5 minutes until the desired amount of neutralizer has been added. **Do not cap these containers during the neutralization process.**

Please contact UNMC EHS at 402-559-6356 or unmcehs@unmc.edu if you have any questions.

HLD Used in Manual Processes (Bath/Tabletop)

Cidex OPA, Sporox, and Revital Ox solutions are placed in smaller table-top secondary containers for soaking instruments. These HLD chemicals have disposal requirements based on the manufacturer's SDS. Additionally, chemicals must have a pH level between 5-9 to be disposed of down the drain (sanitary sewer). Always use adequate water to flush the drain when disposing of neutralized products.

General Precautions: Always wear personal protective equipment (PPE) when handling chemicals. Review the manufacturer's SDS for additional information.

Supplies for Disposal of HLD Chemicals: Lab coat/gown, chemical goggles, chemical resistant gloves, measuring spoon, neutralization product, pH paper.

Cidex OPA Disposal

Cidex OPA is classified as environmentally hazardous and must be neutralized before disposal.

Procedure:

1. Don PPE.
2. Add 25 grams of Glycine Free Base (approx. one heaping tablespoon) to 1 gallon of used, unwanted, or expired Cidex OPA solutions. Glycine is available for purchase in Ariba and Aperex.
3. Shake or mix and let the Glycine/Cidex solution sit for at least 1 hour.
4. Once neutralized, pour the solution down the drain (sanitary sewer). Use adequate water to flush the drain.

Sporox Disposal

Sporox is classified as an oxidizer and must be neutralized to pH 5-9 before disposal.

Procedure:

1. Don PPE.
2. Add 3 oz of sodium bicarbonate (baking soda) to 1 gallon of used, unwanted, or expired Sporox II solutions.
3. Shake or mix and let the sodium bicarbonate/Sporox solution sit for at least 1 hour.
4. Dip pH test strip into the solution, shake off excess liquid, and compare the strips color to the color chart on the packaging, ensuring the pH is between 5-9.
5. Once neutralized, pour the solution down the drain (sanitary sewer). Use adequate water to flush the drain.

Revital Ox Disposal

Revital Ox is classified as an oxidizer and must be neutralized to pH 5-9 before disposal.

Procedure:

1. Don PPE.
2. Add 8 oz of sodium bicarbonate (baking soda) to 1 gallon of used, unwanted, or expired Revital Ox solutions.
3. Shake or mix and let the sodium bicarbonate/Revital Ox solution sit for at least 1 hour.
4. Dip pH test strip into the solution, shake off excess liquid, and compare the strips color to the color chart on the packaging, ensuring the pH is between 5-9.
5. Once neutralized, pour the solution down the drain (sanitary sewer). Use adequate water to flush the drain.

HLD Used in Automated Reprocessors

Revital Ox, Acecide-C, Rapicide, Sonex HL, and TD 8 HLD chemicals are added into automated reprocessors. These automated reprocessors are typically plumbed to a floor drain and disposed of in the sanitary sewer. Automated reprocessors should be equipped with neutralization capabilities within the machine, otherwise, a free-standing neutralizer should be utilized.

Please reference the Expired & Unwanted HLD Chemicals section for guidance on disposing of HLDs not used in the automated reprocessors.

Empty Chemical Containers

Follow the Empty Chemical Container Disposal Fact Sheet for proper disposal of empty HLD chemical containers. **DO NOT** dispose of empty containers as biohazardous (red bin waste).

Please call 402.559.6356 or
Email unmcehs@unmc.edu with any questions.