USP(800) Cleaning Procedures

The ***United States Pharmacopeia*** (*USP*) is a pharmacopeia (compendium of drug information) for the United States published annually by the **United States Pharmacopeial Convention** (usually called the USP). The USP's mission is to improve global health through public standards and related programs to help ensure the quality, safety and benefit of medicines and foods.

USP(800) is the USP General Chapter related to Handling Hazardous Drugs (HD) in Healthcare Settings.

General Information – from USP documents

Section 15:
DEACTIVATING, DECONTAMINATING, CLEANING, AND DISINFECTING
All areas where HDs are handled and all reusable equipment and devices must be deactivated, decontaminated, and cleaned. The deactivating, decontaminating, cleaning, and disinfecting agents selected must be appropriate for the type of HD contaminant(s), location, and surface materials. The products used must be compatible with the surface material. Consult manufacturer or supplier information for compatibility with cleaning agents used. Agents used for deactivation, decontamination, and cleaning should be applied through the use of wipes wetted with appropriate solution and not delivered by a spray bottle to avoid spreading HD residue.

(800) Hazardous Drugs - Handling in Healthcare Settings
USP (800) Cleaning Steps
Cleaning Procedures for Hazardous Drugs (HD)

Table 5. Cleaning Steps

Cleaning Step	Purpose	Example Agents
Deactivation	Render compound inert or inactive	As listed in the HD labeling or other agents which may incorporate Environmental Protection Agency (EPA)-registered oxidizers (e.g., peroxide formulations, sodium hypochlorite, etc.)
Decontamination	Remove HD residue	Materials that have been validated to be effective for HD decontamination, or through other materials proven to be effective through testing, which may include alcohol, water, peroxide, or sodium hypochlorite
Cleaning	Remove organic and inorganic material	Germicidal detergent
Disinfection (for sterile manipulations)	Destroy microorganisms	EPA-registered disinfectant and/or sterile alcohol as appropriate for use

https://www.usp.org/sites/default/files/usp/document/our-work/healthcare-quality-safety/general-chapter-800.pdf

Deactivation - Deactivation renders a compound inert or inactive. Residue from deactivation must be removed by decontaminating the surface. Products that have known deactivation properties (EPA-registered oxidizing agents that are appropriate for the intended use) should be used when possible. Care

should be taken when selecting materials for deactivation due to potential adverse effects (hazardous byproducts, respiratory effects, and caustic damage to surfaces).

Diversey's Oxivir® Tb, Oxivir® 1, Avert®, Accel® Intervention or Accel® Prevention Wipes are EPA and/or Health Canada registered disinfectant cleaners and all use oxidizing agents to achieve their efficacy.

Decontamination - Decontamination occurs by inactivating, neutralizing, or physically removing HD residue from non-disposable surfaces and transferring it to absorbent, disposable materials (e.g., wipes, pads, or towels) appropriate to the area being cleaned. When choosing among various products available for decontaminating HDs, consideration should be given to surface compatibility and facility requirements. It is imperative to adhere to manufacturer's use instructions. Because of the growing number of assays available for HDs, additional surface wipe sampling is now possible and should be done to document the effectiveness of any agent used for decontamination of HD residue from work surfaces.

C-PEC (Containment Primary Engineering Control) is a ventilated device designed and operated to minimize worker and environmental exposure to HDs by controlling emissions of airborne contaminants.

The amount of HD contamination introduced into the C-PEC may be reduced by wiping down HD containers. The solution used for wiping HD packaging must not alter the product label. The work surface of the C-PEC must be decontaminated between compounding of different HDs. The C-PEC must be decontaminated at least daily (when used), any time a spill occurs, before and after certification, any time voluntary interruption occurs, and if the ventilation tool is moved. C-PECs may have areas under the work tray where contamination can build up. These areas must be deactivated, decontaminated, and cleaned at least monthly to reduce the contamination level in the C-PEC. Accessing this area may be difficult. Deactivate, decontaminate, and clean as much as possible of the C-PEC surfaces before accessing the area under the work tray.

Testing performed by a 3rd party laboratory on a variety of commonly used chemotherapy drugs confirmed that cleaning surfaces with Oxivir® Tb, Accel® Intervention or Accel® Prevention Wipes left no detectable chemotherapy drug residue on surfaces, demonstrating the ability to decontaminate (remove) common chemotherapy drugs from surfaces.

Cleaning - Cleaning is a process that results in the removal of contaminants (e.g., soil, microbial contamination, HD residue) from objects and surfaces using water, detergents, surfactants, solvents, and/or other chemicals. Cleaning agents used on compounding equipment should not introduce microbial contamination. No cleaning step may be performed when compounding activities are occurring.

Diversey's Oxivir® Tb, Accel® Intervention or Accel® Prevention Wipes are consistent with the definition of a germicidal detergent.

Disinfection - Disinfection is a process of inhibiting or destroying microorganisms. Before disinfection can be adequately performed, surfaces must be cleaned. Disinfection must be done for areas intended to be sterile, including the sterile compounding areas.

Diversey's Oxivir® Tb, Oxivir® 1, Avert®, Accel® Intervention or Accel® Prevention Wipes are EPA and/or Health Canada registered disinfectants.

References:

1 https://www.usp.org/sites/default/files/usp/document/our-work/healthcare-quality-safety/general-chapter-800.pdf

2 Virox Technologies, Inc. - Assessment of Accelerated Hydrogen Peroxide® disinfectant wipes in removal of chemotherapeutic agents from hard nonporous environmental surfaces