

PeridoxRTU® Sporicidal Disinfectant for Decontaminating Hazardous Drugs

Handling of hazardous drugs has long posed risks for healthcare workers. The health risks associated with handling hazardous drugs have been well documented by numerous organizations including but not limited to Occupational Safety & Health Administration (OSHA), Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH), The American Society of Health-System Pharmacists (ASHP), and The United States Pharmacopeial Convention (USP). There is language in ASHP Guidelines and OSHA's Technical Manual regarding safe handling practices. In addition, USP has now completed Chapter 800 to specifically address safe handling of hazardous drugs.

A major component in safe handling of hazardous drugs is proper containment. A key aspect of proper containment is decontamination of biological safety cabinets, isolators, and other surfaces that come in contact with hazardous substances. Decontamination may be defined as cleaning or deactivating.¹ Surface decontamination may be accomplished by the transfer of hazardous drug contamination from the surface of a nondisposable item to disposable ones.¹ Because there is no one proven method for deactivating all compounds, and there are currently more than 150 different drugs listed by NIOSH as hazardous, Contec set out to validate a cleaning process that would effectively decontaminate by cleaning. The ultimate goal should be complete surface decontamination.²

The SDSs for many hazardous drugs suggest sodium hypochlorite solution as an appropriate deactivating agent. Researchers have shown that strong oxidizing agents, such as sodium hypochlorite, are effective deactivators for many drugs.¹ PeridoxRTU Sporicidal Disinfectant is a peroxyacetic acid/peroxide-based product with higher oxidation values than sodium hypochlorite without the corrosive characteristics of bleach. PeridoxRTU has been shown to effectively remove hazardous drugs from surfaces when used properly.^{3,5} PeridoxRTU is also an ideal choice for decontamination as "quaternary ammonium cleaners should be avoided due to the possibility of vapor build-up in recirculated air."⁴

PeridoxRTU, used in accordance with procedures outlined in Contec's Decontamination of Surfaces Soiled with Hazardous Drugs, is an effective means for decontaminating surfaces contaminated by hazardous drugs.⁵

PeridoxRTU is also an EPA-registered sporicidal disinfectant effective against spores, bacteria, viruses, mycobacterium, and fungi. (Ref. EPA registration #8383-13).

¹ASHP Guidelines for Handling Hazardous Drugs, page 42

²USP <800> Hazardous Drugs- Handling in Healthcare Settings, 15.1 Deactivation

³Oxidation Potential expressed in volts:

Sodium Hypochlorite	1.49
Peroxyacetic Acid	1.81
Hydrogen Peroxide	1.78

⁴OSHA Technical Manual (OTM) Section VI: Chapter 2 Controlling Occupational Exposure to Hazardous Drugs, page 5

⁵Bureau Veritas North America, Inc-01/2014-C47014-000127 Cleaning Efficacy: Hazardous Drug Residues on 316 Stainless Steel