

Sonitor Sense[™]

Cleaning Manual

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1 INTRODUCTION

This document gives recommendations on how to clean Sonitor Sense products.

2 INFRASTRUCTURE

The infrastructure series of Location Transmitters and Gateways do not require extensive cleaning, however, if required, they can be dusted or wiped clean using a damp cloth or wipes.

The following wipes may be used for a gentle wipe down of the infrastructure units.



Note: Do not use wipes containing bleach.



Note: The list below describes compounds tested by Sonitor which were found to be safe for use on infrastructure units. The cleaning and disinfection efficacy of the products has not been tested.

- Medline: Micro-Kill™ 70
- Ecolab: Klerwipe/Klercide 70 | 30 IPA (EPA Reg. No. 1677-249)
- Ecolab: Klerwipe 70 | 30 Denatured Ethanol
- Crystel SILVER (Sterile)
- Purple top PDI Super Sani-Cloth

3 TAGS

The list provided below is a suggestion of tools that can be used to remove visible soiling from tags. Other similar items may be used.

1. Disposable wipes or damp cloth
2. Slim toothbrush-style cleaning brush or other small cleaning brush with *non-metallic bristles*
3. Pointy wooden or plastic cleaning device/stick



Note: Do not use products that leave a residue to clean tags as this can block the tag's microphone.



Note: Do not use gels or other products that leave a residue to clean tags as this can block the tag's microphone.



Figure 1 Examples of suitable cleaning brushes

The following wipes may be used for gentle wipe down of the tag units.



Note: The list below describes compounds tested by Sonitor which were found to be safe for use on infrastructure units. The cleaning and disinfection efficacy of the products has not been tested.

- Medline: Micro-Kill™ 70
- Ecolab: Klerwipe/Klercide 70 | 30 IPA (EPA Reg. No. 1677-249)
- Ecolab: Klerwipe 70 | 30 Denatured Ethanol
- Crystel SILVER (Sterile)
- Purple top PDI Super Sani-Cloth

If tags are attached to brackets, lanyards, wristbands or other accessories, remove them.

1. Using disposable wet wipes or damp cloth, gently clean all the surfaces of the tag.
2. Use a slim brush to get to the hard-to-reach areas. Alternatively, place a wipe around the tip of a pointy cleaning device/stick and clean.



Figure 2 Examples of areas to be cleaned using a slim brush

3. Place a wipe around a pointy cleaning device and clean the seam between the tag base and top, as well as the seam around the switch panel. Alternatively, use a brush. **Avoid using a brush in the microphone area** Figure 3.



Figure 3 Seams to be cleaned using a wipe wrapped around a pointy cleaning device

3.1 SmartTag™ & SmartTag Mini™ - Small Microphone Apertures

This section provides the cleaning agents that can be used on the SmartTags and SmartTag Minis that have small microphone apertures, including tags fitted with the Button Overlay.



Figure 4



Note: Can be submerged in cleaning liquid not exceeding 4 inches/10 centimetres.

Recommended products are provided below. Please see Section 3.5 for maximum concentration of the active ingredients.

- Hydrogen peroxide/Hydrogen peroxide + Peracetic (a.k.a. Peroxyacetic) acid
- Peracetic (a.k.a. Peroxyacetic) acid
- Chlorine dioxide
- Sodium hypochlorite
- Quaternary ammonium compounds

3.2 SmartTag™ - Button Protection Case

This section provides the cleaning agents that can be used on the Button Protection Case. If a SmartTag is fitted with a Button Protection Case, remove the case first, separate the two parts, then use the recommended products listed in this section for the case. For the SmartTag, see Section 3.1. Let the case and SmartTag dry before re-assembling.



Figure 5



Note: Wipe clean only, do not submerge tags with SmartTag Button Protection Case in disinfectant solution. Do not rinse tags with SmartTag Button Protection Case under running water. Use disinfectants which do not require rinsing.



Note: Do not use wipes containing bleach.

Recommended products are provided below. Please see Section 3.5 for maximum concentration of the active ingredients.

- Hydrogen peroxide/Hydrogen peroxide + Peracetic (a.k.a. Peroxyacetic) acid
- Peracetic (a.k.a. Peroxyacetic) acid
- Chlorine dioxide
- Sodium hypochlorite
- Quaternary ammonium compounds

3.3 SmartBadge™

This section provides the cleaning agents that can be used on the SmartBadge.



Note: Wipe clean only, do not submerge tags in disinfectant solution. Do not rinse tags under running water. Use disinfectants which do not require rinsing. Avoid wiping the microphone area.



Note: Do not use wipes containing bleach.

Recommended products are provided below. Please see Section 3.5 for maximum concentration of the active ingredients.

- Hydrogen peroxide/Hydrogen peroxide + Peracetic (a.k.a. Peroxyacetic) acid
- Chlorine dioxide
- Quaternary ammonium compounds

3.4 H135 Digital Input Tag

This section provides the cleaning agents that can be used on the Tag-H135 Digital Input Tag.



● **Note: Wipe clean only, do not submerge tags in disinfectant solution. Do not rinse tags under running water. Use disinfectants which do not require rinsing.**

● **Note: Do not use wipes containing bleach.**

Recommended products are provided below. Please see Section 3.5 for maximum concentration of the active ingredients.

- Hydrogen peroxide/Hydrogen peroxide + Peracetic (a.k.a. Peroxyacetic) acid
- Peracetic (a.k.a. Peroxyacetic) acid
- Chlorine dioxide
- Quaternary ammonium compounds

3.5 Cleaning Agents

This section lists the various cleaning agents recommended in Sections 3.1 to 3.4, the maximum concentrations for active ingredients, and examples for each type. The agents listed in this section are not exhaustive. A variety of products may be used provided the maximum concentration of active ingredients are as specified for each active ingredient.

Agent	Precaution	Examples
Hydrogen peroxide/Hydrogen peroxide + Peracetic (a.k.a. Peroxyacetic) acid	Maximum concentration of hydrogen peroxide: 1.5%	○ EcoLab: OxyCide™ (EPA Reg. No. 1677-237) ○ Clorox Healthcare®: Hydrogen Peroxide Cleaner Disinfectant Liquid and Wipes (Liquid EPA Reg. No. 67619-24. Wipes EPA Reg. No. 67619-25) ○ Virox Technologies Inc.: Accel® TB Liquid and Wipes (Liquid: EPA Reg. No. 74559-1. Wipes: EPA Reg. No. 74559-3)
Peracetic (a.k.a. Peroxyacetic) acid	Maximum concentration: 1.62%	○ DuPont Rely+On™: PeraSafe™ ○ Best Sanitizers, Inc.: K091210 Acecide-C High Level Disinfectant and Sterilant (FDA-Cleared Sterilant)
Chlorine dioxide	Maximum concentration: 0.2%	○ LifeClean AB: LifeClean Desinfektion ○ Global Environmental Restoration Inc.: SNiPER® (EPA Reg. No. 71700-2) ○ Strategic Resource Optimization, Inc.: Electro BioCide™ (EPA Reg. No. 87492-1)
Sodium hypochlorite (household bleach)	• Maximum concentration: 0.55% • Bleach should be diluted with cold water • Always check the label as the percentage of bleach may vary from product to product • Soak in the solution or wipe clean • After soaking/wiping the tags, rinse them with lukewarm water and dry with a paper towel	
Quaternary ammonium compounds	Maximum concentration: 0.5%	This is an example of suitable wipe without alcohol: ○ Sani-Cloth® AF3 Germicidal Disposable Wipe (EPA Reg. No. 9480-9)
Alcohols	• Alcohols, isopropanol or denatured alcohol for instance, should only be used for gentle wipe down • This applies to any combination of other agent and alcohol • Prolonged exposure to wipes with alcohol will damage the adhesives holding the tag's microphone protection, labels and switch panels in place	