

Cleaning and Disinfection Agents

Important: The cleaning and disinfection solutions listed here have been tested for their suitability for the V-Sign™ and OxiVen™ Sensor. The below listed name brand products for cleaning and disinfection may be substituted by other name brand products of equivalent composition. However, as there are many factors (contact time, force applied during wiping etc.) that can influence the functionality of the sensor, it is the responsibility of the user to test the functionality of the sensor after cleaning and/or disinfection. **Sentec recommends using 70% Isopropanol.**

Table 1: Low Level Disinfection

Brand name/ manufacturer	Cleaning procedure
WEBCOL™ Alcohol Prep Pads (Cardinal Health); 70% Isopropanol	Carefully wipe all Sentec TC Sensor surfaces and the cable with alcohol wipes and allow to dry.
Mikrozyd® AF (Schülke&Mayr) pre-soaked wipes; 25% Ethanol, 35% Propan-1-ol	
Kodan® forte (Schülke&Mayr); 45,0% 2-Propanol, 10,0% 1-Propanol, 0,20% Biphenyl-2-ol, Hydrogen peroxide solution (30%)	Carefully wipe all surfaces of the Sentec TC Sensor and the cable with wipes soaked in Kodan forte. Wait 5 min. Remove all Kodan forte residues using 70% Isopropanol. Allow to dry.
Gigasept® AF (Schülke & Mayr); 15% Didecyl dimethyl ammonium chloride, 10% Phenoxypropanole, 6,9% Aminoalkyl gly-cines; 15-30% non-ionic surfactants	Carefully wipe all surfaces of the Sentec TC Sensor and the cable with wipes soaked in 4% solution (e.g. 980 ml deionized water plus 40 ml Gigasept AF). Note that the 4% dilution has a shelf-life of 7 days. Wait 15 min. Remove all Gigasept residues using 70% Isopropanol. Allow to dry.
Terralin® Protect (Schülke & Mayr); 22% Alkyl (C12-16) dimethylbenzyl ammonium chloride, 17% 2-Phenoxyethanol, 0,9% Amines, N-C12-C14 (even numbered)-alkyltrimethylenedi-, reaction products with chloroacetic acid), 5-15% non-ionic surfactants.	Carefully wipe all Sentec TC Sensor surfaces and the cable with wipes soaked in 2% solution (e.g. 980 ml deionized water plus 20 ml Terralin Protect). Wait 15 min. Remove all Terralin residues using 70% Isopropanol. Allow to dry.

Prevantics® Device Swab (PDI); 3,15% Chlorhexidine Gluconate (w/v) and 70% Isopropyl Alcohol (v/v)	Carefully wipe all Sentec TC Sensor surfaces and the cable with the pre-soaked wipe for 5 seconds. Let dry for 5 seconds. Remove all Prevantics residues using 70% Isopropanol. Allow to dry.
Sanoclean AR (Sanosil); 1,5% Hydrogen Peroxide (0,003% Silver)	Carefully wipe all Sentec TC Sensor surfaces and the cable with wipes soaked in Sanoclean AR (note: the commercial solution is ready to use, no further dilution required). Wait 15 minutes. Remove all Sanoclean residues using 70% Isopropanol. Allow to dry.
Dismozon® plus (Bode Chemie); 95,8% Magnesium monoperoxyphthalate hexahdrate	Carefully wipe all Sentec TC Sensor surfaces and the cable with wipes soaked in 3,6% solution (e.g. 36g of Dismozon granulate per liter of deionized water). Note: The diluted solution has a shelf-life of 8h. Wait 15 min. Remove all Dismozon residues using 70% Isopropanol. Allow to dry.
Microbac® Forte (Bode Chemie); 20% Benzyl-C12-18-alkyldimethylammonium-chloride; 5% N-(3-Amino-propyl)-N-dodecylpropan-1,3-diamin	Carefully wipe all Sentec TC surfaces and the cable with wipes soaked in 2% solution (e.g. 980 ml deionized water plus 20 ml Microbac Forte). Wait 15 min. Remove all Microbac Forte residues using 70% Isopropanol. Allow to dry.
Super Sani Cloth® (PDI); 0,25% n-alkyl dimethyl ethylbenzyl ammonium chlorides 0,25% n-alkyl dimethyl benzyl ammonium chlorides 55% Isopropyl Alcohol	Carefully wipe all Sentec TC Sensor surfaces and the cable with the pre-soaked wipe. Wait 2 minutes. Remove all Super Sani Cloth residues using 70% Isopropanol. Allow to dry. CAUTION: This cleaning agent is potentially aggressive to the skin. Thus, sensor membrane must be changed after cleaning to protect the skin.
CaviCide™ or CaviWipe™ (METREX® RESEARCH CORPORATION) 0,28% Diisobutyl-phenoxyethoxyethyl dimethyl benzyl ammonium chloride; 17,2% Isopropanol	Spray CaviCide or use the CaviWipe directly on the sensor surfaces and cable. Allow surface to remain visibly wet for 3 minutes. Remove all CaviCide or CaviWipe residues using 70% Isopropanol. Allow to dry. CAUTION: This cleaning agent is potentially aggressive to the skin. Thus, sensor membrane must be changed after cleaning to protect the skin.

Table 2: High Level Disinfection

Brand name/ manufacturer	Cleaning procedure
Cidex OPA® (J&J); 0,55% ortho-Phthalaldehyde	First, remove debris using an enzymatic detergent: Soak the Sensor and the desired length of cable in enzymatic solution for 5 minutes. Rinse the sensor and the cable briefly in deionized water. Blot dry carefully. Soak the Sensor and the desired length of cable in CIDEX OPA solution for 12 minutes. Soak the Sentec TC Sensor and the desired length of cable 3x for 2 minutes in sterile or deionized water (replace after each soaking cycle). Carefully wipe all surfaces of the Sentec TC Sensor and cable with 70% Isopropanol. Allow to dry. CAUTION: Sensor membrane must be changed after cleaning to ensure optimal sensor monitoring performance.
Note: Requires pre-cleaning using an enzymatic cleaner: ENZOL® (J&J) or Prolystica® (Steris); Subtilisin	
Sani Cloth® Bleach (PDI); Sodium Hypochloride 0,63%	Carefully wipe all Sentec TC Sensor surfaces and the cable with the pre-soaked wipe. Wait 4 minutes Remove all Sani Cloth Bleach residues using 70% Isopropanol. Allow to dry. CAUTION: Do not use bleach cleaners on sensors without a membrane or with a defective membrane. This may damage the PCO ₂ unit.
Approx. 6000 ppm available free chlorine	
Clorox Healthcare® Bleach Germicidal Wipes; 0,55% Sodium Hypochloride 0,52% (5200ppm) available chlorine	CAUTION: Bleach is potentially aggressive to the skin. Thus, sensor membrane must be changed after cleaning to protect the skin.
Mikrozyd® PAA wipes (Schülke & Mayr); 0,06% Per-Acetic acid; Hydrogen Peroxide, Acetic acid	Carefully wipe all Sentec TC Sensor surfaces and the cable with the pre-soaked Mikrozyd PAA wipes. Wait 15 min. Remove all Mikrozyd PAA residues using 70% Isopropanol. Allow to dry.

