

## Exterior Disinfecting Cleaners for the RAPIDPoint® 400/405/500 Systems

Siemens Healthcare Diagnostics understands that some customers are looking for alternatives to bleach (0.5% sodium hypochlorite) as an instrument surface (or exterior) cleaning agent on the RAPIDPoint® 400/405/500 systems.

Our *RAPIDPoint 400/405 Operator's Manual* and *RAPIDPoint 500 Operator's Guide* currently state:

**"CAUTION:** Do not use any solutions containing the benzalkonium chloride ion. Do not wet the sample port or the sensor contacts for the measurement and AutomaticQC cartridges. When cleaning surfaces, do not spray cleaning solution or other fluids into or on the sample port or the area behind the measurement and AutomaticQC cartridge. (For RAPIDPoint systems), do not spray cleaning solutions or other fluids on the optics head assembly. The sensor contacts and the optics head assembly, which are located behind the measurement cartridge, may be damaged if they get wet. Sensors, in the cartridge, may be damaged if cleaning solution enters the sample port."

### Disinfectant Agent Compounds to Avoid

Many disinfectant sprays and wipes contain benzalkonium chloride and other agents (e.g. chlorhexidine) that may interfere with some RAPIDPoint 400/405/500 system sensors. Benzalkonium is an organic salt classified as a quaternary ammonium compound with three main categories of use: as a biocide, a cationic surfactant, and as a phase transfer agent. The quaternary ammonium compounds found in various cleaners can affect some sensors, significantly impacting results, and causing calibration errors. Sensors predominantly affected are sodium and potassium.

Any cleaning agent that contains benzalkonium, other quaternary ammonium compounds or chlorhexidine as an ingredient should not be used as an exterior disinfectant for the RAPIDPoint 400/405/500 systems and sampling devices used for blood gas analysis.

Benzalkonium may be listed as:

- Alkyl dimethyl benzyl ammonium chloride
- Alkyl didecyl dimethyl ammonium chloride
- Dialkyl dimethyl ammonium chloride
- ADBAC, ADMBA, BAC, BKC, BZK, DDAC.

The sodium sensor is monitored in the background as the detection method for benzalkonium exposure. If a benzalkonium exposure is suspected, the retro-calibration sequence may be initiated and remain in effect until the sensor performance and calibration stabilizes.

With the release of software v2.3 onward, a sodium interferent flag was introduced to the RAPIDPoint 500 analyzer. When a sample is run where the system detects the presence of benzalkonium, the message "Sodium Sensor Interferent detected" will be entered in the Events Log accessed through the Recall screen. If the "Sodium Sensor Interferent detected" message is logged, one should determine if there is any source of or exposure to benzalkonium, other quaternary ammonium compounds or chlorhexidine and eliminate it.

**NOTE:** The message will not be displayed on the instrument System screen status Event Log, with the patient sample or on the printed report. Not all incidents of interference will be detected and the risk of erroneous results exists in any case where benzalkonium is introduced to the system.

### Approved Alternative Cleaners

Siemens has evaluated a variety of disinfectant cleaners, and has determined that the following products can be used on the RAPIDPoint 400/405/500 systems as an alternative to 10% bleach:

- Cliniwipe Hard Surface Wipes IPA 200 (Ecolab)
- Incidin OxyFoam S (Ecolab)
- Incidin OxyWipe (Ecolab)
- Incidin OxyWipe S (Ecolab)
- Azo Wipettes (Synergy Health)
- Sani-Cloth Chlor +1000 (PDI)
- Steriplex SD (sBioMed)
- Clinell Alcohol Wipes (GAMA Healthcare)
- Clinell Sporicidal Wipes (GAMA Healthcare)
- CHLOR-CLEAN Clinical Wipes (Guest Medical)
- Clinell Skin Wipe (GAMA Healthcare)

### Cleaners to Avoid

In addition, several disinfectant wipes are **not** recommended, including (but not limited to) the following:

- Super Sani-Cloth Plus (PDI)
- Clinell Universal SanitisingWipes (GAMA Healthcare)
- Clinell Detergent Wipes (GAMA Healthcare)

- Tuffie 5 (Vernacare)
- Virusolve+ Wipes (Amity).

As more disinfectant wipes are evaluated, an expanded list of recommended wipes will be made available.

For technical assistance contact your local technical support provider. For customer service or additional information contact your local technical support distributor.

## **Trademark Information**

RAPIDPoint is a trademark of Siemens Healthcare Diagnostics.

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