

Testing Detection Limits of Detergents and Disinfectants using ChannelCheck™

ChannelCheck™ is a test strip designed to detect the presence of residual carbohydrates, protein and hemoglobin in lumens of cleaned medical devices. ChannelCheck™ was not designed to test for the presence of residual detergents and disinfectants. However, lab testing was conducted to evaluate the limit of detection of various detergents and disinfectants. Residual reprocessing solutions have been linked to injuries to patients and should not be remain after thorough rinsing of the device. ChannelCheck™ pads changed may change color with diluted detergents and disinfectants, thus may demonstrate the presence of residues that should not be left behind.

This is not a comprehensive list of detergents and disinfectants but does represent some common ones used by healthcare facilities. The ChannelCheck™ strips were tested doing volume to volume dilutions with the reprocessing solutions, and strips were observed after 5 minutes.

Detergents

- Certol AW Quad™: the **protein** and the **blood** pads start changing color at a concentration of 2% and higher. The carbohydrate pad is unaffected.
- Getinge Alkaline™: the **protein** pad starts changing color at the concentration of 2.5% and higher. The hemoglobin and carbohydrate pads are unaffected.
- Getinge Neutrawash™: the **protein** pad starts changing color at the concentration of 5% or higher. The hemoglobin and carbohydrate pads are unaffected.
- Getinge Renuzyme™: the **carbohydrate** pad starts changing color at the concentration of 2% or higher. The **protein** pad starts changing color at the concentration of 1% or higher. The hemoglobin pad was unaffected
- Getinge Tec Wash III™: the **protein** pad starts changing color at the concentration of 2.5%. The hemoglobin and carbohydrate pads are unaffected.
- Stryker Blu62™: the **protein** pad starts changing color at the concentration of 1.5%. The hemoglobin and carbohydrate pads are unaffected.
- Medivators Intercept™: the **protein** pad starts changing color at the concentration of 0.02%. The hemoglobin and carbohydrate pads are unaffected

Disinfectants

- Cidex OPA™: At the concentration of 2% and higher the **blood** pad starts showing color change. The other pads are unaffected.
- RevitalOx™: At the concentration of 0.01% and higher the **carbohydrate** pad starts showing color change. At a concentration of 10% and higher, the **blood** pad shows color change. Protein pad is unaffected.
- Rapicide PA™: At the concentration of 0.01% and higher the **carbohydrate** pad starts showing color change. The other pads are unaffected.