

CORIAN® SOLID SURFACE EFFECTS OF HEALTHCARE CHEMICAL DISINFECTANTS

Corian® Solid Surface has been used in numerous applications in the healthcare industry. Installations in a variety of environments include nurses' stations, patient rooms, operating and emergency room walls, scrub stations and patient bath/shower surrounds – just to mention a few. Corian® Solid Surface delivers design flexibility, ease of fabrication in combination with performance, durability and a renewable work surface for today's healthcare industry. This bulletin reviews the compatibility of Corian® Solid Surface with commonly used chemical disinfectant solutions.

The evaluation conducted by the Corian® Design has examined the effects of disinfectant exposure on Corian® Solid Surface. A procedure similar to that described for testing of materials per ISO 19712-2:2007 and ANSI/ICPA SS-1-2001 was used to evaluate the effects that these disinfectants have on Corian® Solid Surface. Several drops of each disinfectant were placed on the surface and covered with a concave glass cover. After 16 hours, the glass cover was removed and the sample was removed from the surface with soap and water or as indicated. The following tables list the disinfectants used in the evaluation, the effect(s) the disinfectant had on the surface and the maintenance needed to renew the surface due to the exposure.

Sterilants /High Level Disinfectants

Disinfectant	Effect on Corian® Solid Surface	Maintenance Procedure
Ortho-Phthalaldehyde	No effect	None Required
Glutaraldehyde	Slight Deglossing	Removed with wet Scotch-Brite™ pad
Glutaraldehyde and Phenol	Slight Deglossing	Removed with wet Scotch-Brite™ pad
Peracetic Acid	Slight Deglossing	Removed with wet Scotch-Brite™ pad
Hydrogen Peroxide	Slight Deglossing	Removed with wet Scotch-Brite™ pad
Hydrogen Peroxide and Paracetic Acid	Moderate Deglossing & Surface Etching	Removed with wet Scotch-Brite™ pad and bleaching and/or abrasive cleanser

Sterilants/High Level Disinfectants: Were used according to the manufacturer's use-dilution directions for High Level Disinfection. Prolonged exposure to concentrated, undiluted disinfectant solutions may lower the gloss on the quartz surface in the affected area and require repair. Clean spills promptly. Additional information regarding Corian® Solid Surface and Maintenance may be found on www.corian.com.

Scotch-Bright™ 7447 (maroon) is recommended for matte finishes
Scotch-Bright™ 7448 (gray) is recommended for semi-gloss finishes

ENVIRONMENTAL SURFACE DISINFECTANTS

Disinfectant	Effect on Corian® Solid Surface	Maintenance Procedure
Ortho-Phthalaldehyde	No effect	None Required
Glutaraldehyde	No effect	None Required
Glutaraldehyde and Phenol	No effect	None Required
Peracetic Acid	No effect	None Required
Hydrogen Peroxide	No effect	None Required
Hydrogen Peroxide and Paracetic Acid	No effect	None Required
Paracetic Acid	No effect	None Required
Phenol	No effect	None Required
Hypochlorite (Bleach)	No effect	None Required
Accelerated Hydrogen Peroxide	No effect	None Required
Alcohol (Ethyl, Isopropyl)	Moderate deglossing	Removed with wet Scotch-Brite™ pad and bleaching and/or abrasive cleanser
Quaternary Ammonium Compounds	No effect	None Required
Alcohol (Ethyl, Isopropyl) and Quaternary Ammonium Compounds	Moderate deglossing and surface etching	Removed with wet Scotch-Brite™ pad and bleaching and/or abrasive cleanser

Environmental Surface Disinfectants were used according to the manufacturer's use-dilution directions for general disinfection. Prolonged exposure to concentrated, undiluted disinfectant solutions may lower the gloss on the quartz surface in the affected area and require repair. Allow disinfectants, in particular alcohols, to dry or actively dry before placing objects on the disinfected surface. Liquid that is not allowed to evaporate could damage the surface. Residual quaternary ammonium compounds can build up on the surface with repeated use, creating a hazy appearance. This can be removed with hot, soapy water. Clean spills promptly, additional information regarding Corian® Solid Surface care and maintenance may be found on www.corian.com

References

Shulster LM, Chinn RYW, Arduino MJ, Carpenter J, Donlan R, Ashford D, Besser R, Fields B, McNeil MM, Whitney C, Wong S, Juraneck D, Cleveland J. Guidelines for environmental infection control in health-care facilities. Recommendations from CDC and the Healthcare Infection Control Practices Advisory Committee (HICPAC). Chicago IL; American Society for Healthcare Engineering/American Hospital Association; 2004.

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