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BSC MYTH BUSTERS

COMMON DISINFECTANT CHEMICAL COMPATIBILITY WITH STAINLESS STEEL

WITH

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THERE ARE A LOT OF RULES, 'GUIDELINES', RUMORS AND MYTHS FOR USING A BIOSAFETY CABINET, WE'LL BE EXPLORING:

WHICH ARE TRUE?

WHICH ARE NOT?

WHY?

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IF YOU HAVE A BSC MYTH THAT COULD USE TESTING, SEND IT TO US! WE'LL GET SOME ANSWERS

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Common Disinfectant Chemical Compatibility with Stainless Steel

Not all disinfectants are appropriate for all microorganisms you'd like to kill, and the same goes for the surface they are applied to. Some chemicals can stain, pit, and/or rust your stainless steel surface of your Biosafety Cabinet (BSC) with repeated use, leaving a hard to clean work surface. Here's a handy chart of commonly used cleaners and their compatibility with 304 and 316 Stainless Steel. As a rule of thumb, all chemicals rated B-D if used, should be followed up with a sterile rinse of a Category A chemical such as sterile water or alcohol to protect your steel. The brand name cleaners referenced are commonly used in pharmacy applications.

Chemical	Ratings	
	304 SS	316 SS
Water, Distilled	A	A
Water, Deionized	A	A
Water, Fresh	A	A
Ethanol	A	A
Iodophor	A	A
Isopropyl Alcohol (70%)	B	B
Sodium Hypochlorite (<20%)	C	C
Sodium Hypochlorite (100%)	D	D
Citric Acid	B	A
DECON-QUAT®	C	B
Peridox®	B	B
Vesphene™	B	B
Vesphene Environ®	D	B
LpH® III se	D	B
EcoLab® disinfectant cleaner	C	B
Iodine	D	D
Chlorine Dioxide	C	C
Hydrogen Peroxide	B	B
Quaternary Ammoniums	C	B

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RATINGS KEY

- **A** Excellent
- **B** Good: Minor Effect, slight corrosion, or discoloration
- **C** Fair: Moderate Effect, not recommended for continuous use. Softening or loss of strength, and swelling may occur
- **D** Severe Effect: Not recommended for any use
- **E** Information not available

Reference: Cole-Parmer Chemical Compatibility Database www.coleparmer.com/chemical-resistance

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