

Contec® Healthcare TB1-3300™ Disinfectant and Disinfectant Wipes Material Compatibility Testing

Goal To determine the surface impact of Contec® Healthcare TB1-3300™ Disinfectant through visible observation over 6 weeks on a variety of common surfaces found in cleanroom, sterile compounding and industrial facilities.

Testing Protocol Twenty-one coupons, each of a different material, were suspended from a holding board over a tray of Contec Healthcare TB1-3300 Disinfectant. The holding board was lowered into the tray so that 1-inch of each coupon was in contact with Contec Healthcare TB1-3300 Disinfectant. The coupons remained in the tray for 10 minutes, after which they were removed and either left to air-dry or dried with a polyester/cellulose wipe wetted with tap water.

These steps were repeated three times weekly over the 6-week testing period on Monday, Wednesday, and Friday.

*TB1-3300 liquid was tested as worst case scenario.

Results The degrees of material degradation are as follows:

No degradation (N): the coupon displayed no signs of wear or damage over the 6-week period and could be comparable to the virgin coupon.

Mild degradation (M): the coupon displayed mild damage or wear at the outset of the testing period, but the degradation did not become more serious over the 6-weeks.

Significant degradation (S): the coupon displayed significant changes or deterioration from the outset of the 6-week period.

The following table presents the degree of material degradation for each coupon and drying method when exposed to Contec Healthcare TB1-3300 Disinfectant.

Material	Compatibility (Air-dried)	Compatibility (Wetted Wipe)
Aluminum, Al 6061	N	N
Copper, CDA 122	S	M
Steel Alloy, C4340	S	M
Galvanized Steel	N	N
Stainless Steel, 304	N	N
Stainless Steel, 316	N	N
Ductile Cast Iron	S	M
Tin/Lead alloy, 60 Sn/40 Pb	N	N
Anodized Aluminum, Al 6061	N	N
Plastic polymer, ABS	N	N
Rubber, Buna N	N	N
Clear Vinyl	N	N
CPVC	N	N
Polymer, Delrin®	N	N
Rubber, EPDM60	N	N
Polymer, Kynar®	N	N
Polycarbonate, Lexan™	N	N
Neoprene	N	N
Polystyrene	N	N
Polycarbonate	N	N
Polyurethane	N	N
Acrylic*	N	N

Conclusion Using a wipe wetted with tap water after cleaning with Contec Healthcare TB1-3300 Disinfectant is recommended.

Non-reactive coupons that were dried with a wetted wipe displayed no evidence of residue in contrast to those left to air-dry. Reactive coupons dried with a wetted wipe exhibited a more limited reaction than those that were air-dried.

* Best practices within sterile compounding encourage glass barriers be used in the primary engineering controls, and no protective coatings on secondary engineering control floors. Although no impacts were observed in this study, certain grades of acrylic found throughout the sterile compounding environment may exhibit slight haziness or crazing after prolonged exposure to Contec Healthcare TB1-3300 Disinfectants. This can be mitigated by periodically rinsing surfaces treated with TB1-3300 (after achieving the required 1-minute dwell/contact time). Acrylic coatings in secondary engineering controls should be avoided due to solvent based chemistries used throughout the environment.