

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 09/09/2003

Experimenters: Jason Marshall

ClientType: Lab

ProjectNumber: Project #1

Substrates: Brass

PartType: Coupon

Contaminants: Buffing/Polishing Compounds

Cleaning Methods: Immersion/Soak

Analytical Methods: Gravimetric

Purpose: Laboratory evaluations of alternative cleaning products

Experimental Procedure: Basic cleaning performance testing was conducted using ASTM G122 as the bases for cleaning. Four products were used at full strength, heated to 120 F on a hot plate. Twelve preweighed coupons were coated with Jackson Lea Antique Buffing Compound LM 12 (9000-70-8, 1344-28-1, 409-21-2, 1309-37-1) and allowed to dry overnight and reweighed. Three coupons were cleaned in each solution for 5 minutes using stir-bar-agitation, rinsed in a tap water bath for 15 seconds at 120 F and dried using air blow off for 30 seconds at 68 F. Coupons were allowed to dry overnight and then reweighed a final time. Efficiencies were calculated.  
Note: Bio T Foam Plus was sprayed onto coupons at room temperature and allowed to sit for 5 minutes. The cleaner was then wiped clean.

Results: Two products removed over 85% of this buffing compound. A third product may work with longer cleaning time.

Summary:

|                      |                             |               |                    |                                     |                      |
|----------------------|-----------------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>   | Brass                       |               |                    |                                     |                      |
| <b>Contaminants:</b> | Buffing/Polishing Compounds |               |                    |                                     |                      |
| <b>Company Name:</b> | <b>Product Name:</b>        | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| AW Chesterton        | 278 Super Solv              | 100           | 85.96              | <input checked="" type="checkbox"/> |                      |
| Bio Chem Systems     | Bio T Foam Plus             | 100           | 85.87              | <input checked="" type="checkbox"/> |                      |
| Invista S.a.r.l      | Flexisolv DBE Ester         | 100           | 62.50              | <input type="checkbox"/>            |                      |
| Gemtek Products      | SC EZ Solv Safety Solvent   | 100           | 12.40              | <input type="checkbox"/>            |                      |

Conclusion: AW Chesterton 278 Super Solv and Bio Chem Systems Bio T Foam Plus were effective at removing this buffing compound. DuPont's DBE may work with longer cleaning time.