

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2018  
 DateRun: 02/02/2018  
 Experimenters: James Keats, Justin Rainaud  
 ClientType:  
 ProjectNumber: Project #2  
 Substrates: Stainless Steel  
 PartType: Coupon  
 Contaminants: Blood  
 Cleaning Methods: Immersion/Soak  
 Analytical Methods: Gravimetric  
 Purpose: To evaluate effectiveness of the provided cleaners in regards to removing synthetic blood from stainless steel.

Experimental Procedure: Twelve pre-weighed stainless-steel coupons were soiled with synthetic blood using a swab and allowed to air dry for 24 hours before recording dirty weights. Two additional coupons were weighed but not soiled to provide a control. Two cleaners were prepared using the specified dilutions and temperature: Biogone (RTU at 22 C); Biogone (1:1 at 22 C).

Six coupons per cleaner were immersed in a beaker for two minutes. Coupons were rinsed in a DI water bath and dried for 48 hours before recording clean weights.

Results:

| Cleaner     | Initial Wt | Final Wt | %Removal | Average |
|-------------|------------|----------|----------|---------|
| Biogone RTU | 0.0020     | 0.0005   | 75.00    | 65.07   |
|             | 0.0029     | 0.0013   | 55.17    |         |
|             | 0.0101     | 0.0015   | 85.15    |         |
|             | 0.0143     | 0.0009   | 93.71    |         |
|             | 0.0037     | 0.0023   | 37.84    |         |
|             | 0.0062     | 0.0035   | 43.55    |         |
|             | 0.0046     | 0.0003   | -        | Control |
| Biogone 1:1 | 0.0067     | 0.0035   | 47.76    | 40.23   |
|             | 0.0089     | 0.0043   | 51.69    |         |
|             | 0.0132     | 0.0082   | 37.88    |         |
|             | 0.0075     | 0.0033   | 56.00    |         |
|             | 0.0092     | 0.0092   | 0.00     |         |
|             | 0.0052     | 0.0027   | 48.08    |         |
|             | 0.0019     | 0.0008   | -        | Control |

Summary:

|                      |                                |               |                    |                                     |                      |
|----------------------|--------------------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>   | Stainless Steel                |               |                    |                                     |                      |
| <b>Contaminants:</b> | Blood                          |               |                    |                                     |                      |
| <b>Company Name:</b> | <b>Product Name:</b>           | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| Case Medical Inc.    | BioGone Cleaner/Decontaminator | 100           | 65.07              | <input checked="" type="checkbox"/> |                      |
| Case Medical Inc.    | BioGone Cleaner/Decontaminator | 50            | 40.23              | <input type="checkbox"/>            |                      |

Conclusion:

Both dilutions of Biogone were not effective. The RTU dilution was about 25% more effective than the 1:1 dilution. The same ranking was observed using visual analysis.