## Hawk's Sterlion<sup>™</sup> Additive Protects the Surface from **Bacterial Growth**

In accordance with ISO 22196

## BACKGROUND:

To measure the antimicrobial activity on plastics and other non-porous surfaces coated with Hawk Topcoat Systems containing Sterlion\* antimicrobial additive, Hawk engaged a third party independent laboratory, Industrial Microbiological Services Ltd., to conduct the ISO 22196 test on IsoFree™ Series Topcoat Systems and GlasTech<sup>™</sup> 9000 Series Topcoat Systems.

The standardized test analyzes two types of common bacteria, Staphylococcus aureus (Staph aureus), a gram positive bacteria, and Escherichia coli (E coli), a gram negative bacteria. The test compares a "control" (no Sterlion added) sample, and a "treated sample" (treated with Sterlion) over a 24 hour period, and measures the amount of bacteria on the surface before and after the testing period.

## **RESULTS:**

The chart below indicates that Sterlion antimicrobial additive is 99% effective at reducing E coli bacteria, and 99%+ effective at reducing Staph bacteria on the treated sample for both Topcoat Systems. \*Therefore, Sterlion additive is effective at inhibiting the growth of mildew on the coating, prevents discoloration of the coating due to mold, and prevents odor-causing bacteria on the coating.

| SAMPLE                                | BACTERIA<br>SPECIES | CONTACT<br>TIME | CONTACT<br>TIME | REDUCTION<br>Log 10 | (INITIAL)<br>% |
|---------------------------------------|---------------------|-----------------|-----------------|---------------------|----------------|
| IsoFree™ Series (Control)             | E coli              | 1.7E+04         | 1.1E+05         |                     |                |
| IsoFree Series (Treated Sample)       | E coli              | 1.7E+04         | 1.9E+02         | 1.9                 | 99%            |
| IsoFree Series (Control)              | Staph aureus        | 1.7E+04         | 4.9E+03         |                     |                |
| IsoFree Series (Treated Sample)       | Staph aureus        | 1.7E+04         | <11.11          | ≥ 3.18              | 99%            |
| GlasTech™ 9000 Series (Control)       | E coli              | 1.6E+04         | 3.6E+03         |                     |                |
| GlasTech 9000 Series (Treated Sample) | E coli              | 1.6E+04         | <11.11          | ≥ 2.51              | 99%            |
| GlasTech™ 9000 Series (Control)       | Staph aureus        | 2.2E+04         | 8.5E+03         |                     |                |
| GlasTech 9000 Series (Treated Sample) | Staph aureus        | 2.2E+04         | <11.11          | ≥ 2.88              | 99%            |



Testing Conditions: 24 hours at 35° C under a RH of > 95%

sales@hawklabs.com | 800.321.HAWK (4295) www.hawklabs.com



HAWK RESEARCH LABORATORIES, LLC.