

**KILL LIST**

**EPA STANDARD: GOOD LABORATORY PRACTICES (GLP)**

| <b>VIROCIDAL HARD-SURFACE TEST (VIRUS)</b>                   | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
|--|---------------|---------------|---------------|----------------------|------------------|----------------------|--------------------|
| CANINE DISTEMPER VIRUS                                       | CDV           | 9/3/2019      |               | MICROBAC             | 10 MIN.          | IN PROGRESS          | >99.999%           |
| HEPATITUS A STRAIN HM175/18F U OF OTTAWA                     | HAV           | 12/6/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| HEPATITUS B (DUCK) - SURROGATE FOR HUMAN                     | HBV           | 12/4/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| HEPATITUS C (BOVINE VIRAL DIARRHEA)                          | HCV           | 12/4/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| (HIV-1) - HUMAN IMMUNODEFICIENCY VIRUS TYPE-1                | HIV - 1       | 12/4/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| INFLUENZA A VIRUS (H1N1) - AKA "SWINE FLU"                   | H1N1          | 12/4/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| NOROVIRUS (Feline Calicivirus - from cats)                   | FCV           | 11/30/2015    |               | MICROBAC             | 10 MIN.          | Yes                  | >99.999%           |
| NOROVIRUS (Murine - from rodents)                            | MNV           | 12/14/2015    |               | MICROBAC             | 10 MIN.          | Yes                  | >99.999%           |
| <b>AOAC GERMICIDAL SPRAY TEST (BACTERIA)</b>                 | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
| CARBAPENEM-RESISTANT ENTERBACTER (CRE)                       | CRE           | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.999%           |
| CARBAPENEM-RESISTANT KIEBSIELLA PNEUMONIAE                   | CRKP          | 12/4/2018     |               | MICROBAC             | 2 MIN.           | Yes                  | pending            |
| (E-COLI) - ESCHERICHIA COLI                                  | E.COLI        | 8/26/2019     |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| LISTERIA MONOCYTOGENES                                       |               | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.6%             |
| MICROCCUS YUNNANENSIS  |               | 12/12/2019    |               | MICROBAC             | 2 MIN.           | Yes                  | pending            |
| PSEUDOMONAS AERUGINOSA                                       |               | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.999%           |
| PSEUDOMONAS ORYZIHABITANS                                    |               | 12/12/2019    |               | MICROBAC             | 2 MIN.           | Yes                  | pending            |
| SALMONELLA ENTERICA  |               | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.8%             |
| STAPHYLOCOCCUS AUREUS (Methicillin Resistant)                | MRSA          | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.999%           |
| STAPHYLOCOCCUS EPIDERMIDIS                                   |               | 12/12/2019    |               | MICROBAC             | 2 MIN.           | Yes                  | >99.999%           |
| (TB) - MYCOBACTERIUM BOVIS                                   | TB            | 10/31/2018    |               | EMSL                 | 10 MIN.          | Yes                  | >99.999%           |
| VANCOMYCIN-RESISTANT ENTEROCOCCUS                            | VRE           | 10/31/2018    |               | EMSL                 | 2 MIN.           | Yes                  | >99.5%             |
| <b>AOAC GERMICIDAL SPRAY TEST (FUNGAL)</b>                   | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
| ALTERNANIA ALTERNATA   |               |               |               | MICROBAC             |                  | IN PROGRESS          | pending            |
| ASPERGILLUS BRASILENSIS                                      |               |               |               |                      |                  | IN PROGRESS          | pending            |
| CANDIDA ALBICANS   |               | 6/11/2019     |               | MICROBAC             | 10 MIN.          | IN PROGRESS          | >99.999%           |
| CANDIDA AURIS  |               | 1/7/2020      |               | MICROBAC             | 10 MIN.          | IN PROGRESS          | >99.999%           |
| CIADSPORIUM HERBARUM   |               |               |               | MIRCOBAC             |                  | IN PROGRESS          | pending            |
| PENICILLIUM OXALLCUM   |               |               |               | MIRCOBAC             |                  | IN PROGRESS          | pending            |
| STACHYBOTRYS CHARTARTUM (AKA: BLACK MOLD)                    |               |               |               | MICROBAC             |                  | IN PROGRESS          | pending            |
| TRIHOPYTON INTERDIGITALE (AKA: RINGWORM)                     |               | 1/13/2020     |               | MICROBAC             | 2 MIN.           | IN PROGRESS          | pending            |
| <b>GERMICIDAL AND DETERGENT SANITIZING (BACTERIA)</b>        | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
| STAPHYLOCOCCUS AUREUS  | S.AUREUS      | 8/27/2019     |               | MICROBAC             | 30 SEC.          | Yes                  | >99.999%           |
| (E-COLI) - ESCHERICHIA COLI                                  | E-COLI        | 8/27/2019     |               | MICROBAC             | 30 SEC.          | Yes                  | >99.999%           |
| <b>NON-FOOD CONTACT SOFT SURFACES (BACTERIA)</b>             | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
| STAPHYLOCOCCUS AUREUS  | S.AUREUS      | 10/15/2019    |               | MICROBAC             | 5 MIN.           | IN PROGRESS          | >99.999%           |
| KLEBSIELLA PNEUMONIAE  |               | 10/15/2019    |               | MICROBAC             | 5 MIN.           | IN PROGRESS          | >99.999%           |
| <b>C-DIFF (CLOSTRIDIUM DIFFICILE SPORES TEST) (BACTERIA)</b> | <b>ABREV.</b> | <b>PASSED</b> | <b>FAILED</b> | <b>LABORATORY</b>    | <b>KILL TIME</b> | <b>On EPA Label?</b> | <b>% kill rate</b> |
| (EPA MLB SOP MB-31: new protocol using 5% organic load test) | C - DIFF.     |               | 7/12/2019     | MICROBAC             |                  | No                   |                    |
| (EPA MLB SOP MB-28: original protocol - hard surface test)   | C - DIFF.     | 11/25/2019    |               | ANALYTICAL LAB GROUP | 10 MIN.          | IN PROGRESS          | >99.999%           |

"Pending" = awaiting final lab report with verified % kill rate.