# Chemgene MEDLAB.

## MICROBIOLOGICAL EFFICACY

Chemgene MEDLAB has been tested to the following European PT2 test standards.

**Medical**

- EN13727 & EN17387 (bactericidal)
- EN13624 & EN17387 (yeasticidal, fungicidal)
- EN16777 (virucidal – all enveloped viruses)
- EN16777 (Adenovirus, Norovirus)
- EN14348 (Mycobactericidal)
- EN16615 (disinfectant wipe test)

**Domestic**

- EN14476 (virucidal – all enveloped viruses)
- EN14476 (Adenovirus, Norovirus)

**Other**

- EN13623 (Legionella)
- EN13610 (Bacteriophage)

### DILUTION CHART

| Effective against | Dilution | Contact time |
|---|---|---|
| **Bactericidal.** Incl. ESKAPE organisms, Moraxella, Streptococcus pyrogenes, E.coli | 1 % | 5 mins |
| **Bactericidal.** Legionella | 1 % | 10 mins |
| **Bacteriophages** | 1 % | 5 mins |
| **Yeasticidal.** Incl. Candida alicans, Candida auris | 1 % | 10 mins |
| **Virucidal (enveloped viruses).** Incl. Vaccinia virus, HIV, Hepatitis B & C, Herpes Simplex, Coronovirus | 1 % | 10 mins |
| **Fungicidal.** Incl. Aspergillus brasilliensis | 5 % | 10 mins |
| **Virucidal (non-enveloped viruses).**<br>Adenovirus<br>Norovirus | <br>10 %<br>10 % | <br>5 mins<br>30 mins |
| **Mycobactericidal**[1)]<br>Mycobacterium avium<br>Mycobacterium terrae | <br>5 % min.<br>5 % min. | <br>60 mins<br>60 mins |

[1)] Applicable to concentrate/ready to use spray only. Efficacy is not applicable to wipes.

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### YEASTICIDAL/FUNGICIDAL EFFICACY

| Test organisms | Test ref | Formula | Test conditions | Test result |
|---|---|---|---|---|
| **Aspergillus brasiliensis** | EN13624 | Conc 5% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | RTU | 5 mins / high soil / 20 °C | |
| | | Wipes | 30 mins / low soil / 20 °C | |
| | EN17387 | Conc 5% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | RTU | 10 mins / low soil / 20 °C | |
| | | RTU | 30 mins / high soil / 20 °C | |
| **Candida albicans** | EN13624 | Conc 1% | 5 mins / high soil / 20 °C | >4 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 2% | 5 mins / high soil / 20 °C | |
| | | RTU | 2 mins / high soil / 20 °C | |
| | EN16615 | RTU | 5 mins / low soil / 20 °C | >4 log reduction[1)] |
| | | Wipes | 1 min / low soil / 20 °C | |
| **Candida auris** | EN13624 | Conc 2% | 5 mins / low soil / 20 °C | >4 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 2% | 5 mins / low soil / 20 °C | |
| | | RTU | 2 mins / high soil / 20 °C | |

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# MICROBIOLOGICAL EFFICACY

## BACTERICIDAL EFFICACY

| Test organisms | Test ref | Formula | Test conditions | Test result |
|---|---|---|---|---|
| **Acinetobacter baumanii** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Enterobacter cloacae** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Enterococcus faecium** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Enterococcus hirae** | EN13727 | Conc 1% | 5 mins / high soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | Conc 2% | 5 mins / high soil / 20 °C | |
| | | RTU | 1 min / high soil / 20 °C | |
| | EN16615 | RTU | 5 mins / low soil / 20 °C | >5 log reduction[1)] |
| | | Wipes | 1 min / low soil / 20 °C | |
| **Escherichia coli** | EN13727 | Conc 1% | 5 mins / high soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Klebsiella pneumoniae** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |

[1)] Modified Stainless Steel

## BACTERICIDAL EFFICACY

| Test organisms | Test ref | Formula | Test conditions | Test result |
|---|---|---|---|---|
| **Legionella pneumophila** | EN13623 | Conc 1% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 2% | 5 mins / low soil / 20 °C | |
| | | RTU & Wipes | 1 min / 0.0005% yeast extract / 20 °C | |
| **Methicillin–resistant Staphylococcus aureus (MRSA)** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Moraxella catarrhalis** | EN13727 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil, 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| **Pseudomonas aeruginosa** | EN13727 | Conc 1% | 5 mins / low soil, 20 °C | >5 log reduction |
| | | Conc 2% | 5 mins / high soil / 20 °C | |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | Conc 2% | 5 mins / high soil / 20 °C | |
| | | RTU | 1 min / high soil / 20 °C | |
| | EN16615 | RTU | 5 mins / low soil / 20 °C | >5 log reduction[1)] |
| | | Wipes | 1 min / low soil / 20 °C | |
| **Staphylococcus aureus** | EN13727 | Conc 1% | 5 mins / high soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | Conc 2% | 5 mins / high soil / 20 °C | |
| | | RTU | 1 min / high soil / 20 °C | |
| | EN16615 | RTU | 5 mins / low soil / 20 °C | >5 log reduction[1)] |
| | | Wipes | 1 min / low soil / 20 °C | |
| **Streptococcus pyogenes** | EN13737 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN17387 | Conc 1% | 5 mins / low soil / 20 °C | >5 log reduction |
| | | RTU | 1 min / high soil / 20 °C | |

[1)] Modified Stainless Steel

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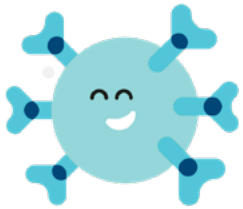
# MICROBIOLOGICAL EFFICACY



## VIRUCIDAL EFFICACY

| Test organisms | Test ref | Formula | Test conditions | Test result |
|---|---|---|---|---|
| **Vaccinia virus** including Coronavirus, Hepatitis B, Hepatits C, Herpes simplex, HIV | EN14476 | Conc 1% | 1 min / low soil / 20 °C | >4 log reduction |
| | | Conc 2% | 15 mins / high soil / 20 °C | |
| | | RTU | 1 min / high soil / 20 °C | |
| | | Wipes | 1 min / low soil / 20 °C | |
| | EN16777 | Conc 1% | 10 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 2% | 15 mins / high soil / 20 °C | |
| | | RTU | 1 min / low soil / 20 °C | |
| | | RTU | 5 mins / high soil / 20 °C | |
| **Adenovirus** | EN14476 | Conc 10 % & RTU | 5 mins / low soil / 20 °C | >4 log reduction |
| | EN16777 | Conc 10 % & RTU | 5 mins / low soil / 20 °C | >4 log reduction |
| **Norovirus** | EN14476 | Conc 5% | 5 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 10 % & RTU | 2 mins / low soil / 20 °C | |
| | | RTU | 5 mins / high soil / 20 °C | |
| | EN16777 | Conc 5% | 45 mins / low soil / 20 °C | >4 log reduction |
| | | Conc 10 % & RTU | 30 mins / low soil / 20 °C | |
| | | RTU | 45 mins / high soil / 20 °C | |

## VIRUCIDAL EFFICACY AGAINST BACTERIOPHAGES

| Test organisms | Test ref | Formula tested | Test conditions | Test result |
|---|---|---|---|---|
| **Lactococcus lactis subsp. lactis P001 DSM 4262** | EN13610 | Conc & RTU | 5 mins / 1% acidic whey / 0.5 % / 20 °C | >4 log reduction |
| **Lactococcus lactis subsp. lactis P008 DSM 10567** | EN13610 | RTU | 5 mins / 1% acidic whey / 0.5%, 20 °C | >4 log reduction |
| **Lactococcus lactis subsp. lactis P008 DSM 10567** | EN13610 | Conc | 5 mins / 1% acidic whey / 1 %, 20 °C | >4 log reduction |

## MYCOBACTERIAL EFFICACY

| Test organisms | Test ref | Formula | Test conditions | Test result |
|---|---|---|---|---|
| **Mycobacterium avium** | EN14348 | Conc 5% | 60 mins / high soil / 20 °C | >4 log reduction |
| | | RTU | 60 mins / high soil / 20 °C | |
| **Mycobacterium terrae** | EN14348 | Conc 5% | 60 mins / high soil / 20 °C | >4 log reduction |
| | | RTU | 60 mins / high soil / 20 °C | |

Wipes are not included within this EN14348 efficacy statement.

## ADDITIONAL DATA

| Test method | Test result |
|---|---|
| **Preservative Efficacy Testing** | Complies with the test for the Efficacy of Antimicrobial Preservatives (European Pharmacopoeia 11th Edition) |
| **DNA/RNA Denaturation** | Effective at denaturing DNA / RNA in 5 mins, at 1 % dilution. The DNA/ RNA's molecular structure is disrupted, making it non-functional (inactivated). |
| **Stain and odour testing** | Effective at removing staining and odour from carpet tiles caused by common household agents including red wine, coffee, garden soil and synthetic cat vomit, at 20% dilution |
| **Hard surface cleaning test** | Effective at cleaning both synthetic cat vomit and blood stains from polyurethane substrate (substitute for hard flooring), at 2% dilution. Spray formula is proven to be compatible with dry wipes and microfibre clothes |

**Chemgene MEDLAB multi-surface disinfectants** are compliant with regulations in the UK & EU including the Biocidal Products Regulation (BPR), Classification of Labelling and Packaging (CLP) and Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations.