

Order no.:

Customer ID:

Sampling by: customer  
Date of sampling: 26.09.2013  
Date of receipt: 26.09.2013  
Date of test start: 08.10.2013

Lucerne, 11 October 2013

## Test Report

### Determination of the activity of antimicrobial agents in polymeric or hydrophobic materials

Order no. customer:

Sample: 3491-0231+Perlazid (Schichtdicke: 6-8my)  
Batch no.: /  
Control sample: Platte 3491-0231 0-Stand  
Test method: ASTM E 2180-07, modified (Standard test method for determining the activity of incorporated antimicrobial agent(s) in polymeric or hydrophobic materials)

Test surface area: 2.0 x 4.0 cm  
Agar slurry composition: 8.5 g/l NaCl containing 3 g/l agar  
Inoculum volume: 0.9 ml  
Exposure time: 24 h  
Exposure temperature: 22.5 ± 2.5°C

Test organism: **Escherichia coli ATCC 8739**

|                       | Replicate 1<br>(cfu)  | Replicate 2<br>(cfu)  | Replicate 3<br>(cfu)  | Geometric mean<br>(cfu) |
|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------|
| Control sample (0 h)  | 4.1 x 10 <sup>6</sup> | 3.6 x 10 <sup>6</sup> | 2.0 x 10 <sup>6</sup> | 3.1 x 10 <sup>6</sup>   |
| Control sample (24 h) | 1.8 x 10 <sup>7</sup> | 1.8 x 10 <sup>7</sup> | 1.3 x 10 <sup>7</sup> | 1.6 x 10 <sup>7</sup>   |
| Treated sample (24 h) | < 10                  | < 10                  | < 10                  | < 10                    |

**Reduction after 24 h** >  $\frac{(1.6 \times 10^7 - 10) \times 100}{1.6 \times 10^7}$  > **99.99993% (> 6.2 log units)**

Test organism: **Pseudomonas aeruginosa ATCC 9027**

|                       | Replicate 1<br>(cfu) | Replicate 2<br>(cfu) | Replicate 3<br>(cfu) | Geometric mean<br>(cfu) |
|-----------------------|----------------------|----------------------|----------------------|-------------------------|
| Control sample (0 h)  | $1.9 \times 10^6$    | $1.6 \times 10^6$    | $1.8 \times 10^6$    | $1.8 \times 10^6$       |
| Control sample (24 h) | $2.0 \times 10^7$    | $1.6 \times 10^7$    | $1.5 \times 10^7$    | $1.7 \times 10^7$       |
| Treated sample (24 h) | < 10                 | < 10                 | < 10                 | < 10                    |

**Reduction after 24 h** >  $\frac{(1.7 \times 10^7 - 10) \times 100}{1.7 \times 10^7}$  > **99.99994% (> 6.2 log units)**



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The results reported here relate exclusively to the presently investigated sample. Specifications of analytical reliability can be obtained from the laboratory upon request.

