**Test Report for a Hand Rub Product**
**BS EN 1276:2019**

UKAS TESTING 8615

| | |
|---|---|
| Company Name: | Osmio Solutions |
| Contact Name: | Mark Kent |
| Contact Email: | invoices@osmiowater.co.uk |
| Purchase Order No: | N/A |
| Report Date: | 27/11/2020 |
| **Melbec Ref Number:** | 21887.1 |
| **No. of Samples:** | 1 |
| **Name of Test Product:** | Osmio Sanser Spray Hand Hygiene/General Purpose Disinfectant (10min cycle) |
| **Batch Number:** | After Production |


Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

**Test Report for a Hand Rub Product**
**BS EN 1276:2019**

UKAS TESTING 8615

**Sample Details:**

| | |
|---|---|
| Manufacture / Supplier:..... | Osmio Solutions |
| Product storage conditions:..... | Ambient |
| Appearance of the product (as supplied):..... | Spray bottle, filled to line with synthetic hard water and 4 spoons of salt added and set to 300mg. |
| Appearance of the product (after dilution):..... | N/A |
| Appearance of product with interfering substance and test organism: | Pale yellow liquid |
| Active substance and concentration:..... | Sodium Hypochlorite |
| Product dilutions/concentrations:..... | Ready to Use (RTU) |
| Diluent used to dilute product:..... | N/A |
| Incubation temperature: ..... | 36 degrees |

The test product was in satisfactory condition for testing when received.

Date product received: 30/10/20 Test Date: 16/11/20

**Experimental Conditions:**

| | |
|---|---|
| Interfering substance: | Bovine Albumin (dirty 3.0g/l) |
| Test temperature: | 18 to 25 ˚C |
| Contact time: | 60 Seconds |
| Test organisms: | Pseudomonas aeruginosa ATCC 15442 |
| | Staphylococcus aureus ATCC 6538 |
| | Escherichia coli K12 NCTC 10538 |
| | Enterococcus hirae ATCC 10541 |
| | Escherichia coli ATCC 10536 |

**Requirements of the Standard:**

The test product shall demonstrate at least a 5 decimal logarithm (lg) reduction when tested in accordance with this standard under simulated clean or dirty conditions.


Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

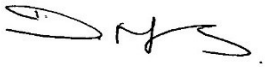
**Conclusion:**

For the product Osmio Sanser Spray Hand Hygiene/General Purpose Disinfectant (10min cycle), [After Production] the log reduction requirements as specified in EN 1276:2019 (5 lg within the relevant contact time) were met in dirty conditions for a contact time of 60 seconds.

Testing carried out by:

Name: Gemma Morgan
Position: Technical Manager

Report authorised by:



Name: Dawn Mellors
Position: Technical Director
Date: 27/11/2020



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

**Test Results:**

**Neutralisation Method Used:**

Dilution neutralisation by pour plate

Neutraliser used N1



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

# Test Report for a Hand Rub Product
# BS EN 1276:2019

UKAS TESTING 8615

***Pseudomonas aeruginosa ATCC 15442***

## Validation and controls

| Melbec Ref No | 21887.1 |
|---|---|

| Validation suspension ($Nv_0$) | | | Experimental conditions control (***A***) | | | Neutralizer control (***B***) | | | Method validation (***C***) Product conc: | | RTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Vc* 1 | 113 | $\bar{x}$ = | *Vc* 1 | 61 | $\bar{x}$ = | *Vc* 1 | 80 | $\bar{x}$ = | *Vc* 1 | 64 | $\bar{x}$ = |
| *Vc* 2 | 107 | 110 | *Vc* 2 | 61 | 61 | *Vc* 2 | 78 | 79 | *Vc* 2 | 52 | 58 |
| 30 ≤ $\bar{x}$ of $Nv_0$ ≤ 160? **Yes** | | | $\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | |

**Test suspension and test**

| | ***N*** | *Vc* 1 | *Vc* 2 | | |
|---|---|---|---|---|---|
| **Test suspension (*N* and $N_0$):** | $10^{-6}$ | >330 | >330 | X m 4.60E+08 ; lg *N* = | 8.66 |
| | | | | $N_0 = N/10$ ; lg $N_0$= | 7.66 |
| | $10^{-7}$ | 49 | 43 | 7.17 ≤ lg$N_0$ ≤ 7.70? | Yes |
| | | | | $\bar{x}$ quotient = >5 and <15? | N/A |

| Conc. of the product (%) | *Vc* 1 | *Vc* 2 | *Na* = $\bar{x}$ *x10* | lg*Na* | lg*R* $N_0$ = 7.66 | | Contact time | Result |
|---|---|---|---|---|---|---|---|---|
| RTU | <14 | <14 | 1.40E+02 | <2.15 | | >5.52 | 60 Seconds | **Pass** |



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

***Staphylococcus aureus ATCC 6538***

**Validation and controls**

| **Melbec Ref No** | **21887.1** |
|---|---|

| Validation suspension ($Nv_0$) | | | Experimental conditions control (***A***) | | | Neutralizer control (***B***) | | | Method validation (***C***) Product conc: | | RTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Vc* 1 | 60 | $\bar{x}$ = | *Vc* 1 | 54 | $\bar{x}$ = | *Vc* 1 | 70 | $\bar{x}$ = | *Vc* 1 | 68 | $\bar{x}$ = |
| *Vc* 2 | 56 | 58 | *Vc* 2 | 37 | 45.5 | *Vc* 2 | 61 | 65.5 | *Vc* 2 | 67 | 67.5 |
| 30 ≤ $\bar{x}$ of $Nv_0$ ≤ 160? **Yes** | | | $\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | |

**Test suspension and test**

| **Test suspension (*N* and $N_0$):** | ***N*** | *Vc* 1 | *Vc* 2 | | | |
|---|---|---|---|---|---|---|
| | $10^{-6}$ | >330 | >330 | X m | 4.25E+08 | ; lg *N* = 8.63 |
| | | | | $N_0 = N/10$ | ; lg $N_0$= | 7.63 |
| | $10^{-7}$ | 43 | 42 | 7.17 ≤ lg$N_0$ ≤ 7.70? | | Yes |
| | | | | $\bar{x}$ quotient = >5 and <15? | | N/A |

| Conc. of the product (%) | *Vc* 1 | *Vc* 2 | *Na* = $\bar{x}$ *x10* | lg*Na* | lg*R* $N_0$ = 7.63 | | Contact time | Result |
|---|---|---|---|---|---|---|---|---|
| RTU | <14 | <14 | 1.40E+02 | <2.15 | | >5.48 | 60 Seconds | **Pass** |



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

# Test Report for a Hand Rub Product
# BS EN 1276:2019

UKAS TESTING 8615

***Escherichia coli K12 NCTC 10538***

## Validation and controls

| Melbec Ref No | 21887.1 |
|---|---|

| Validation suspension ($Nv_0$) | | | Experimental conditions control (***A***) | | | Neutralizer control (***B***) | | | Method validation (***C***) Product conc: RTU | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Vc* 1 | 96 | $\bar{x}$ = | *Vc* 1 | 63 | $\bar{x}$ = | *Vc* 1 | 86 | $\bar{x}$ = | *Vc* 1 | 84 | $\bar{x}$ = |
| *Vc* 2 | 88 | 92 | *Vc* 2 | 55 | 59 | *Vc* 2 | 72 | 79 | *Vc* 2 | 64 | 74 |
| 30 ≤ $\bar{x}$ of $Nv_0$ ≤ 160? **Yes** | | | $\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | |

**Test suspension and test**

| **Test suspension** (***N*** **and** $N_0$): | ***N*** | *Vc* 1 | *Vc* 2 | | | |
|---|---|---|---|---|---|---|
| | $10^{-6}$ | >330 | >330 | X m 4.85E+08 | ; lg *N* = | 8.69 |
| | | | | $N_0 = N/10$ | ; lg $N_0$= | 7.69 |
| | $10^{-7}$ | 52 | 45 | 7.17 ≤ lg$N_0$ ≤ 7.70? | Yes | |
| | | | | $\bar{x}$ quotient = >5 and <15? | | N/A |

| Conc. of the product (%) | *Vc* 1 | *Vc* 2 | *Na* = $\bar{x}$ *x10* | lg*Na* | lg*R* $N_0$ = 7.69 | | Contact time | Result |
|---|---|---|---|---|---|---|---|---|
| RTU | <14 | <14 | 1.40E+02 | <2.15 | | >5.54 | 60 Seconds | **Pass** |



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

***Enterococcus hirae ATCC 10541***

**Validation and controls**

| **Melbec Ref No** | **21887.1** |
|---|---|

| Validation suspension ($Nv_0$) | | | Experimental conditions control (***A***) | | | Neutralizer control (***B***) | | | Method validation (***C***) Product conc: | | RTU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Vc* 1 | 95 | $\bar{x}$ = | *Vc* 1 | 75 | $\bar{x}$ = | *Vc* 1 | 96 | $\bar{x}$ = | *Vc* 1 | 50 | $\bar{x}$ = |
| *Vc* 2 | 82 | 88.5 | *Vc* 2 | 63 | 69 | *Vc* 2 | 62 | 79 | *Vc* 2 | 48 | 49 |
| 30 ≤ $\bar{x}$ of $Nv_0$ ≤ 160? **Yes** | | | $\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | |

**Test suspension and test**

| **Test suspension** (***N*** **and** $N_0$): | ***N*** | *Vc* 1 | *Vc* 2 | | | |
|---|---|---|---|---|---|---|
| | $10^{-6}$ | >330 | >330 | X m | 4.55E+08 | ; lg *N* = 8.66 |
| | | | | $N_0 = N/10$ | ; lg $N_0$= | 7.66 |
| | $10^{-7}$ | 46 | 45 | 7.17 ≤ lg$N_0$ ≤ 7.70? | | Yes |
| | | | | $\bar{x}$ quotient = >5 and <15? | | N/A |

| Conc. of the product (%) | *Vc* 1 | *Vc* 2 | *Na* = $\bar{x}$ *x10* | lg*Na* | lg*R* $N_0$ = 7.66 | | Contact time | Result |
|---|---|---|---|---|---|---|---|---|
| RTU | <14 | <14 | 1.40E+02 | <2.15 | | >5.51 | 60 Seconds | **Pass** |



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.

***Escherichia coli ATCC 10536***

**Validation and controls**

| **Melbec Ref No** | **0** |
|---|---|

| Validation suspension ($Nv_0$) | | | Experimental conditions control (***A***) | | | Neutralizer control (***B***) | | | Method validation (***C***) Product conc: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Vc* 1 | 104 | $\bar{x}$ = | *Vc* 1 | 109 | $\bar{x}$ = | *Vc* 1 | 91 | $\bar{x}$ = | *Vc* 1 | 90 | $\bar{x}$ = |
| *Vc* 2 | 98 | 101 | *Vc* 2 | 81 | 95 | *Vc* 2 | 85 | 88 | *Vc* 2 | 74 | 82 |
| 30 ≤ $\bar{x}$ of $Nv_0$ ≤ 160? **Yes** | | | $\bar{x}$ of A is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of B is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | | $\bar{x}$ of C is ≥ 0.5 x $\bar{x}$ of $Nv_0$? **Yes** | | |

**Test suspension and test**

| **Test suspension** (***N*** **and** $N_0$): | ***N*** | *Vc* 1 | *Vc* 2 | | | |
|---|---|---|---|---|---|---|
| | $10^{-6}$ | >330 | >330 | X m | 3.95E+08 | ; lg *N* = 8.60 |
| | | | | $N_0 = N/10$ | ; lg $N_0$= | 7.60 |
| | $10^{-7}$ | 40 | 39 | 7.17 ≤ lg$N_0$ ≤ 7.70? | | Yes |
| | | | | $\bar{x}$ quotient = >5 and <15? | | N/A |

| Conc. of the product (%) | *Vc* 1 | *Vc* 2 | *Na* = $\bar{x}$ *x10* | lg*Na* | lg***R*** $N_0$ = | 7.60 | Contact time | Result |
|---|---|---|---|---|---|---|---|---|
| RTU | <14 | <14 | 1.40E+02 | <2.15 | | >5.45 | 60 Seconds | **Pass** |



Melbec Microbiology Ltd, Imperial House, Kingsway Haslingden BB4 4QJ. Tel: 01706 214492
info@melbecmicrobiology.co.uk, www.melbecmicrobiology.co.uk. Registered in England. Company No 8604622. VAT No 167 85794.