

TEST REPORT TOETSVERSLAG

SABS

South African Bureau of Standards
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Private Bag X191, Pretoria, 0001
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Tel (012) 428-7911 Faks (012) 344-1568
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U verw/Your ref. dd 99-02-22

Health and Hygiene
Attention: Mr.J.Temperley
P.O.Box 347
SUNNINGHILL
2157

Ons verw/Our ref. 17/37/9

Navrae/Enquiries 428-6087

Datum/Date 1999 -03- 16

5447/1066950/S846

bladsy/page 1 van/of 2

FORMULA 10 SUPER CONCENTRATE

1. DESCRIPTION OF SAMPLES

One sample labelled "Formula 10 Super Concentrate Batch 990207" was received on 1999-02-22 and tested on 1999-02-24.

2. TESTS REQUESTED

To determine the bactericidal efficacy of the sample subject to the following conditions:

- | | | |
|----|----------------------|---|
| a) | Dilution of sample: | 0,2% |
| b) | Diluent: | Sterile water |
| c) | Temperature of test: | 20°C |
| d) | Test organisms: | <i>P.aeruginosa</i> SATCC Pse 16 <i>E.coli</i> SATCC Ecs 25 <i>S.aureus</i> SATCC Sta 53 <i>Enterococcus hirae</i> SATCC Str 6 |
| e) | Test organism load: | Approximately 10 ⁸ organisms per 10 ml of test solution; |
| f) | Exposure time: | 5 min. |
| g) | Inactivator: | A suitable fluid inactivator |
| h) | Counting medium: | Nutrient and Brain Heart agar |

THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE

3. METHOD/.....

TEST REPORT No. 5447/1066950/S846
TOETSVERSLAGNO

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3. METHOD OF TEST

The sample was tested in accordance with the method described in the BS EN Standard 1276:1997 for Chemical disinfectants and antiseptics- Basic bactericidal activity-Test method and requirements (phase 1) and subject to the conditions stated in Paragraph 2 above.

4. RESULTS

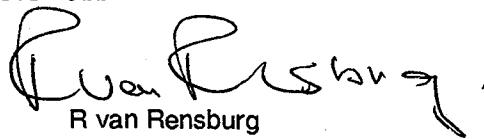
Bactericidal efficacy

| Sample | Dilution | Exposure time | Reduction in viability (Clean conditions) | | | |
|--|----------|---------------|---|-----------------------|-----------------------|-----------------------|
| | | | <i>P.aeruginosa</i> | <i>E.coli</i> | <i>S.aereus</i> | <i>Ent.hirae</i> |
| Formula 10 Super Concentrate Batch 990207 | 0,2% | 5 min | > 2,1x10 ⁵ | > 2,1x10 ⁵ | > 2,1x10 ⁵ | > 2,1x10 ⁵ |

REMARK:

When tested in accordance with clause 5, shall demonstrate at least a 10⁵ log reduction in viable counts.

FAX NO.(011) 803-4022


R van Rensburg
MICROBIOLOGY DEPARTMENT

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TEST REPORT**SABS**

Health and Hygiene
Attention: Mr.J.Temperley
 P.O.Box 347
 SUNNINGHILL
 2157

U verw/Your ref. dd 99-03-12

Ons verw/Our ref. 17/37/9

Navrae/Enquiries 428-6087

Datum/Date 14-10-2002

5447/1066950/S1183a

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FORMULA 10 SUPER CONCENTRATE**1. DESCRIPTION OF SAMPLES**

One sample labelled "Formula 10 Super Concentrate Batch 990207" was received on 1999-02-22 and tested on 1999-03-20.

| |
|--|
| THIS TEST HAS BEEN CARRIED OUT USING A FIO "SUPER CONCENTRATE" SAMPLE |
|--|

2. TESTS REQUESTED

To determine the bactericidal efficacy of the sample subject to the following conditions:

- a) Dilution of sample: 0,2%
- b) Diluent: Sterile hard water with a hardness lower than 300 mg/kg of CaCO₃
 clean conditions: 0,3g/ℓ
 dirty conditions: 1% skimmed milk
- c) Temperature of test: 20°C and 10°C
- d) Test organisms: *P.aeruginosa* ATCC 15442
E.coli ATCC 10536
S.aureus ATCC 6538
Enterococcus hirae ATCC 8043
- e) Test organism load: Approximately 10⁸ organisms per 10 ml of test solution;
- f) Exposure time: 5 min. and 1 min.
- g) Inactivator: A suitable fluid inactivator
- h) Counting medium: Nutrient and Brain Heart agar

3. METHOD/.....

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3. METHOD OF TEST

The sample was tested in accordance with the method described in the prEN 1276:1997 for Chemical disinfectants and antiseptics- Basic bactericidal activity-Test method and requirements (clause 5) and subject to the conditions stated in Paragraph 2 above.

4. RESULTS

Bactericidal efficacy

| Sample | Dilution | Condi- tions | Exposure time | Number of cfu/mℓ in test mixture | | | |
|---|--------------------|-----------------|------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| | | | | <i>P. aeruginosa</i> | <i>E. coli</i> | <i>S. aereus</i> | <i>Ent. hirae</i> |
| Formula 10 Super Concen- trate Batch 990207 | 0,2% at 20°C | Clean | 5 min | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | | 1 min | > 3,0x10 ³ | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | Dirty | 5 min | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | | 1 min | 9,6x10 ² | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| Formula 10 Super Concen- trate Batch 990207 | 0,2% at 10°C | Clean | 5 min | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | | 1 min | > 3,0x10 ³ | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | Dirty | 5 min | 3,02x10 ³ | < 1,5x10 ² | < 1,5x10 ² | < 1,5x10 ² |
| | | | 1 min | > 3,0x10 ³ | 7,1x10 ³ | < 1,5x10 ² | < 1,5x10 ² |

| Sample | Dilution | Condition | Contact time | Reduction in viability | | | |
|---|-----------------|-----------|-----------------|--------------------------|---------------------|----------------------|-----------------------|
| | | | | <i>P. aeruginosa</i> | <i>E. coli</i> | <i>S. aureus</i> | <i>Ent. hirae</i> |
| Formula 10 Super concentrate Batch 990207 | 0,2% at 20°C | Clean | 5 min | > 5 | > 5 | > 5 | > 5 |
| | | | 1 min | < 5 | > 5 | > 5 | > 5 |
| | | Dirty | 5 min | > 5 | > 5 | > 5 | > 5 |
| | | | 1 min | 5,6x10 ³ | > 5 | > 5 | > 5 |
| | 0,2% at 10°C | Clean | 5 min | > 5 | > 5 | > 5 | > 5 |
| | | | 1 min | < 5 | > 5 | > 5 | > 5 |
| | | Dirty | 5 min | 1,78x10 ⁴ | > 5 | > 5 | > 5 |
| | | | 1 min | < 5 | 1,4x10 ³ | > 5 | > 5 |

REMARK:

When tested in accordance with clause 5, the sample shall demonstrate at least a 10⁵ or more reduction in viability.

This report relates only to the specific sample(s) tested as identified herein. It does not imply SABS approval of the quality and/or performance of the item(s) in question and the test results do not apply to any similar item that has not been tested. (Refer also to the complete conditions

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| Test Organisms | Validation test | | | Bacterial test suspension |
|---------------------|----------------------|------------------------------|---------------------------------|---------------------------|
| | Bacterial Suspension | Neutralizer toxicity control | Dilution neutralization control | |
| <i>P.aeruginosa</i> | $5,4 \times 10^3$ | $4,6 \times 10^2$ | $4,0 \times 10^2$ | $5,4 \times 10^7$ |
| <i>E.coli</i> | $1,0 \times 10^3$ | $6,8 \times 10^2$ | $6,1 \times 10^2$ | $1,0 \times 10^8$ |
| <i>S.aureus</i> | $3,9 \times 10^3$ | $2,3 \times 10^3$ | $2,1 \times 10^3$ | $3,9 \times 10^8$ |
| <i>Ent.hirae</i> | $1,3 \times 10^3$ | $8,2 \times 10^2$ | $9,4 \times 10^2$ | $1,3 \times 10^8$ |

FAX NO.(011) 803-4022



✓ R van Rensburg
MICROBIOLOGY DEPARTMENT

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TEST REPORT TOETSVERSLAG

SABS

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U verw/Your ref. dd 99-02-17

Ons verw/Our ref. 17/37/9

Navrae/Enquiries 428-6087

Datum/Date 1999 -03- 16

5447/1066950/S779

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Health and Hygiene
Attention: Mr.J.Temperley
P.O.Box 347
SUNNINGHILL
2157
L

FORMULA 10 SUPER CONCENTRATE

1. DESCRIPTION OF SAMPLES

One sample labelled "Formula 10 Super Concentrate Batch 990207" was received on 1999-02-17 and tested on 1999-02-17.

2. TESTS REQUESTED

To determine the bactericidal efficacy of the sample subject to the following conditions:

- a) Dilution of sample: 0,2%, 0,3% and 0,4%
- b) Diluent: Sterile water
- c) Temperature of test: 20°C
- d) Test organisms: *P.aeruginosa* SATCC Pse 16 and
S.aureus SATCC Sta 53
- e) Test organism load: Approximately 10^8 organisms per 10 ml of test solution;
- f) Exposure time: 5 min.
- g) Inactivator: A suitable fluid inactivator
- h) Counting medium: Nutrient agar

3. METHOD/.....

THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE

TEST REPORT No. 5447/1066950/S779
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3. METHOD OF TEST

The sample was tested in accordance with the method described in the BS EN Standard 1040:1997 for Chemical disinfectants and antiseptics- Basic bactericidal activity-Test method and requirements (phase 1) and subject to the conditions stated in Paragraph 2 above.

4. RESULTS


Bactericidal efficacy

| Sample | Dilution | Exposure time | Reduction in viability | |
|---|----------|---------------|------------------------|-----------------------|
| | | | <i>P.aeruginosa</i> | <i>S.aureus</i> |
| Formula 10 Super Concentrate Batch 990207 | 0,2% | 5 min | > 2,1x10 ⁵ | > 2,1x10 ⁵ |
| | 0,3% | | > 2,1x10 ⁵ | > 2,1x10 ⁵ |
| | 0,4% | | > 2,1x10 ⁵ | > 2,1x10 ⁵ |

REMARK:

When tested in accordance with clause 5, shall demonstrate at least a 10⁵ log reduction in viable counts.

FAX NO.(011) 472-4211


R van Rensburg
MICROBIOLOGY DEPARTMENT

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TEST REPORT TOETSVERSLAG

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South African Bureau of Standards
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U verw/Your ref. dd 99-02-17

Ons verw/Our ref. 17/37/9

Navrae/Enquiries 428-6087

Datum/Date 1999-03-11

5447/1066950/S779a

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Health and Hygiene
Attention: Mr.J.Temperley
P.O.Box 347
SUNNINGHILL
2157

FORMULA 10 SUPER CONCENTRATE**1. DESCRIPTION OF SAMPLES**

One sample labelled "Formula 10 Super Concentrate Batch 990207" was received on 1999-02-17 and tested on 1999-02-17.

2. TESTS REQUESTED

To determine the fungicidal efficacy of the sample subject to the following conditions:

- a) Dilution of sample: 0,2% and 0,3%
- b) Diluent: Sterile water plus 1% skimmed milk.
- c) Temperature of test: 10°C and 30°C
- d) Test organisms: *Aspergillus niger* ATCC 16404
Candida albicans ATCC 10231
- e) Test organism load: Approximately 10^7 organisms per 10 ml of test solution;
- f) Exposure time: 30 min.
- g) Inactivator: A suitable fluid inactivator
- h) Counting medium: Malt agar and YM agar

3. METHOD/.....

**THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE**

TEST REPORT No.
TOETSVERSLAGNO

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3. METHOD OF TEST

The sample was tested in accordance with the method described in the EN 1657:1994 for Chemical disinfectants and antiseptics used in veterinary area- Basic fungicidal activity- and subject to the conditions stated in Paragraph 2 above.

4. RESULTS

Fungicidal efficacy

| Sample | Dilution | Temperature | Exposure time | Number of cfu/ml in test mixture | |
|---|----------|-------------|---------------|----------------------------------|---------------------|
| | | | | <i>A.niger</i> | <i>C.albicans</i> |
| Formula 10 Super Concentrate Batch 990207 | 0,2% | 10°C | 30 min | 1,0x10 ⁵ | 1,2x10 ⁵ |
| | 0,3% | | | 5,2x10 ⁴ | 4,3x10 ³ |
| | 0,2% | 30°C | | NT | < 10 |
| | 0,3% | | | NT | < 10 |

| Sample | Dilution | Temperature | Contact time | Reduction in viability | |
|---|----------|-------------|--------------|--------------------------|-----------------------|
| | | | | <i>Aspergillus niger</i> | <i>C.albicans</i> |
| Formula 10 Super concentrate Batch 990207 | 0,2% | 10°C | 30 min | 4,7x10 ¹ | 1,9x10 ² |
| | 0,3% | | | 9,0x10 ² | 5,3x10 ⁵ |
| | 0,2% | 30°C | | NT | > 2,1x10 ⁵ |
| | 0,3% | | | NT | > 2,1x10 ⁵ |

Note: NT = not tested

REMARK:

When tested in accordance with clause 5, shall demonstrate at least a 3x10² cfu/mL reduction in viable counts from 1x10⁸-3x10⁶ cfu/mL count, within 30 min at 10°C or 30°C for teat disinfectants.

Note: Teat disinfectants are required to demonstrate fungicidal activity against *Candida albicans* only.

TEST REPORT No.
TOETSVERSLAGNO

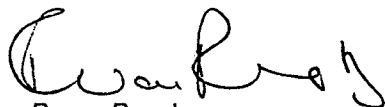
5447/1066950/S779a

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| Test Organisms | Validation test | | | Organism test suspension |
|-------------------|---------------------|------------------------------|---------------------------------|--------------------------|
| | Organism Suspension | Neutralizer toxicity control | Dilution neutralization control | Fungal test suspension |
| <i>A.niger</i> | 9,0x10 ² | 4,0x10 ¹ | 6,0x10 ¹ | 2,6x10 ⁷ |
| <i>C.albicans</i> | 2,0x10 ² | 1,1x10 ² | 7,2x10 ¹ | 2,3x10 ⁸ |

FAX NO.(011) 803-4022


R van Rensburg
MICROBIOLOGY DEPARTMENT**Confidentiality Notice:**

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MICROBIOLOGY DEPARTMENT 7218

Health & Hygiene
Attention: Mr JP Temperley
P.O.Box 347
SUNNINGHILL
2157

U verw/Your ref: O/N S 060

Ons verw/Our ref: 17/37/9

Navrae/Enquiries: 428-6087

Datum/Date: 2005-02-04

1733791/04-2186/X31628a

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DISINFECTANT EFFICACY TEST - EN 13704 -2002

THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE

1. DESCRIPTION OF SAMPLE

One sample labelled "F10SC B/N 211" was received on 6/7/2004 and tested on 9/7/2004.

2. TESTS REQUESTED

Sporicidal activity of the chemical disinfectant using *Bacillus subtilis* spores as test organism.

3. METHOD OF TEST

The sample was tested in accordance with EN 13704-2002 Specification for Disinfectants.

3.1 A test suspension of bacterial spores in solution of interfering substance, simulating clean conditions, added to a preparation sample of the product under test diluted in hard water. (Dilution: 1/50 and 1/100)

3.2 The mixture is maintained at 20°C ± 1°C for 5 minutes and 60 minutes ± 10 seconds.

3.3 At this contact time an aliquot was taken and the sporicidal action is immediately neutralized using a suitable neutralizer.

3.4 Test spore suspension *Bacillus subtilis* ATCC 6633.

Spore suspension requirement:

The number of spores in the test suspension adjusted to $1,5 \times 10^6$ to 5×10^6 cfu/ml.

Suspension maintained in a water bath at 20°C ± 1°C (use within 2 hours)

4 Results /

SABS test report

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- 3.5 Hard Water – anhydrous magnesium chloride, anhydrous calcium chloride and sodium bicarbonate.
- 3.6 Interfering substance – 1% Skimmed milk

4. RESULTS

Sporicidal activity of F10SC (B/N 211)

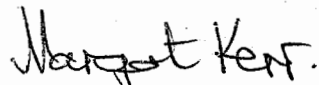
| Sample | Dilution | Contact time | Serial dilution | <i>B. subtilis</i> spores | | |
|------------------------------|-----------------|------------------|------------------|---------------------------|-----------------|------|
| | | | | cfu /ml | Percentage kill | |
| F10SC B/N 211 (X31628) | 1/100 | 5min | Direct | 100 | 15 | 99,9 |
| | | | 10 ⁻¹ | | 123 | 97,0 |
| | | | 10 ⁻² | | 15 | 99,7 |
| | | | 10 ⁻³ | | 1 | 97,6 |
| | av. kill 99.9 % | | | | | |
| | 1/100 | 60 min | Direct | 171 | 191 | 99,5 |
| | | | 10 ⁻¹ | | 138 | 97,0 |
| | | | 10 ⁻² | | 22 | 95,0 |
| | | | 10 ⁻³ | | 0 | 99,9 |
| | av. kill 99.9 % | | | | | |
| | 1/50 | 5 min | Direct | 5 | 2 | 99,9 |
| | | | 10 ⁻¹ | | 66 | 98,4 |
| 10 ⁻² | | | | 13 | 97,0 | |
| 10 ⁻³ | | | | 1 | 98,0 | |
| av. kill 99.9 % | | | | | | |
| 1/50 | 60 min | Direct | 116 | 112 | 99,7 | |
| | | 10 ⁻¹ | | 159 | 96,2 | |
| | | 10 ⁻² | | 19 | 95,4 | |
| | | 10 ⁻³ | | 1 | 95,2 | |
| av. kill 99.8 % | | | | | | |

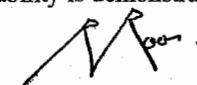
Spore suspension:

Initial spore suspension count – 2,85 x 10⁶ cfu /ml

Conclusion:

Sporicidal activity for specific purpose is characterized by the concentration of the test product for which criteria are met for which a 10³ (99,9%) or more reduction in viability is demonstrated under required test conditions.


 MA KERR
 TEST OFFICER: MICROBIOLOGY


 RA ROOS
 MANAGER: MICROBIOLOGY DEPARTMENT

Fax: (011) 474 1670

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This report relates only to the specific sample(s) tested as identified herein. It does not imply SABS approval of the quality and/or performance of the item(s) in question and the test results do not apply to any similar item that has not been tested. (Refer also to the complete conditions printed on the back of official test reports.)

MICROBIOLOGY DEPARTMENT 7218

Health & Hygiene
Attention: Mr JP Temperley
P.O.Box 347
SUNNINGHILL
2157

U verw/Your ref: O/N S 060

Ons verw/Our ref: 17/37/9

Navrae/Enquiries: 428-6087

Datum/Date: 2005-02-04

1733791/04-2186/X 31628b

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DISINFECTANT EFFICACY TEST – EN 1650 - 1997

THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE

1. DESCRIPTION OF SAMPLE

One sample labelled "F10SC B/N 211" was received on 6/7/2004 and tested 9/7/2004.

2. TESTS REQUESTED

Fungicidal activity of the chemical disinfectant using *Aspergillus niger* spores as test organism.

3. METHOD OF TEST

The sample was tested in accordance with EN 1650-1997 Specification for Disinfectants.

3.1 A test suspension of fungal spores in solution of interfering substance, simulating clean conditions, added to a preparation sample of the product under test diluted in hard water.

3.2 The mixture is maintained at 20°C ± 1°C for 5 minutes and 15 minutes ± 10 seconds.

3.3 At this contact time an aliquot was taken and the fungicidal action is immediately neutralized using a suitable neutralizer.

3.4 Test spore suspension *Aspergillus niger* ATCC 16404.

Spore suspension requirement:

The number of spores in the test suspension adjusted to 1,5 x 10⁶ to 5 x 10⁶ cfu/ml.

Suspension maintained in a water bath at 20°C ± 1°C (use within 2 hours)

4 Results /

SABS test report

REPORT No.

1733791/04-2186/X31628b

Page 2

- 3.5 Hard Water – anhydrous magnesium chloride, anhydrous calcium chloride and sodium bicarbonate.
- 3.6 Interfering substance – 1% Skimmed milk

4. RESULTS

Fungicidal activity of F10SC (B/N 211)

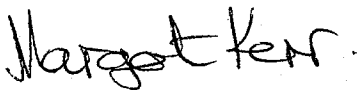
| Sample | Dilution | Contact time | Serial dilution | <i>Aspergillus niger</i> spores | |
|------------------------------|----------|------------------|------------------|---------------------------------|-----------------|
| | | | | cfu/ml | Percentage kill |
| F10SC B/N 211 (X31628) | 1/50 | 5min | 10 ⁻¹ | 159 | 99,9 |
| | | | 10 ⁻² | 90 | 99,7 |
| | | | 10 ⁻³ | 52 | 98,4 |
| | 1/50 | 15 min | 10 ⁻¹ | 138 | 99,9 |
| | | | 10 ⁻² | 111 | 99,7 |
| | | | 10 ⁻³ | 54 | 98,4 |
| | 1/100 | 5 min | 10 ⁻¹ | 113 | 99,9 |
| | | | 10 ⁻² | 86 | 99,7 |
| | | | 10 ⁻³ | 34 | 99,0 |
| 1/100 | 15min | 10 ⁻¹ | 115 | 99,9 | |
| | | 10 ⁻² | 86 | 99,7 | |
| | | 10 ⁻³ | 31 | 99,0 | |

Spore suspension:

Initial spore suspension count – $4,85 \times 10^6$ cfu /ml (within the requirement)

Conclusion:

Fungicidal activity for specific purpose is characterized by the concentration of the test product for which criteria are met for which a 10³ (99,9%) or more reduction in viability is demonstrated under required test conditions.



MA KERR
TEST OFFICER: MICROBIOLOGY



RA ROOS
MANAGER: MICROBIOLOGY

Fax: (011) 474 1670

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MICROBIOLOGY DEPARTMENT 7218

Health & Hygiene
Attention: Mr JP Temperley
P.O.Box 347
SUNNINGHILL
2157

U verw/Your ref: O/N S060

Ons verw/Our ref: 17/37/9

Navrae/Enquiries: 428-6087

Datum/Date: 2005-02-04

1733791/04-2186/X 31628c

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DISINFECTANT EFFICACY TEST – EN 13697-2001

**THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE**

1. DESCRIPTION OF SAMPLE

One sample labelled "F10SC B/N 211" was received on 6/7/2004 and tested on 9/7/2004.

2. TESTS REQUESTED

Fungicidal activity of the chemical disinfectant using *Aspergillus niger* spores as test organism.

3. METHOD OF TEST

The sample was tested in accordance with EN 13697 - 2001 Specification for Disinfectants.

- 3.1 A test suspension of fungal spores in solution of interfering substance, simulating clean conditions, added to a preparation sample of the product under test diluted in hard water.
- 3.2 The mixture is maintained at 20°C ± 1°C for 5 minutes and 15 minutes ± 10 seconds.
- 3.3 At this contact time an aliquot was taken and the fungicidal action is immediately neutralized using a suitable neutralizer.
- 3.4 Test spore suspension *Aspergillus niger* ATCC 16404.

Spore suspension requirement:

The number of spores in the test suspension adjusted to $1,5 \times 10^6$ to 5×10^6 cfu/ml.

Suspension maintained in a water bath at 20°C ± 1°C (use within 2 hours)

4 Results /

SABS test report

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- 3.5 Hard Water – anhydrous magnesium chloride, anhydrous calcium chloride and sodium bicarbonate.
- 3.6 Interfering substance – 1% Skimmed milk

4. RESULTS

Fungicidal activity of F10SC (B/N 211)

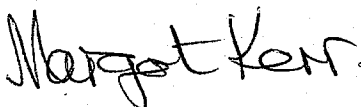
| Sample | Dilution | Contact time | Direct | <i>Aspergillus niger</i> spores | | |
|------------------------------|----------|--------------|--------|---------------------------------|-----------------|-------|
| | | | | cfu/ml duplicates | Percentage kill | |
| F10SC B/N 211 (X31628) | 1/50 | 5min | Disc | 111 | 64 | 99,99 |
| | 1/50 | 15 min | Disc | 77 | 65 | 99,99 |
| | 1/100 | 5 min | Disc | 88 | 69 | 99,99 |
| | 1/100 | 15min | Disc | 60 | 67 | 99,99 |

Spore suspension:

Initial spore suspension count – $1,6 \times 10^6$ cfu/ml (within the requirement)

Conclusion:

Quantitative non porous surface test (disc) for the evaluation of fungicidal activity of chemical disinfectants used in the food, industrial, domestic and institutional areas – without mechanical action for which a 10^3 (99,99%) or more reduction in viability is demonstrated under required test conditions.



MA KERR
TEST OFFICER: MICROBIOLOGY



RA ROOS
MANAGER: MICROBIOLOGY

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MICROBIOLOGY DEPARTMENT 7218

Health & Hygiene
Attention: Mr JP Temperley
P.O.Box 347
SUNNINGHILL
2157

U verw/Your ref: e-M 4/10/2004

Ons verw/Our ref: 17/37/9

Navrae/Enquiries: 428-6087

Datum/Date: 2005-02-04

1733791/04-3294/X38022-3

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DISINFECTANT EFFICACY TEST – EN 13704 - 2002

**THIS TEST HAS BEEN
CARRIED OUT USING A
FIO "SUPER CONCENTRATE"
SAMPLE**

1. DESCRIPTION OF SAMPLES

Two samples labelled "F10SC B/N 050506 & F10SC B/N 211" were received on 7/10/2004 and tested on 13/10/2004 and 19/10/2004.

2. TESTS REQUESTED

Sporicidal activity of the chemical disinfectant using *Bacillus subtilis* spores as test organism.

3. METHOD OF TEST

The samples were tested in accordance with EN 13704-2002 Specification for Disinfectants.

3.1 A test suspension of bacterial spores in solution of interfering substance, simulating clean conditions, added to a preparation sample of the product under test diluted in hard water. (Dilution 1/100)

3.2 The mixture is maintained at 20°C ± 1°C for 5 minutes ± 10 seconds.

3.3 At this contact time an aliquot was taken and the sporicidal action is immediately neutralized using a suitable neutralizer.

3.4 Test spore suspension *Bacillus subtilis* ATCC 6633.

Spore suspension requirement:

The number of spores in the test suspension adjusted to $1,5 \times 10^6$ to 5×10^6 cfu/ml.

Suspension maintained in a water bath at 20°C ± 1°C (use within 2 hours)

4 Results /

SABS test report

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3.5 Hard Water – anhydrous magnesium chloride, anhydrous calcium chloride and sodium bicarbonate.

3.6 Interfering substance – 1% Skimmed milk

4. RESULTS

Sporicidal activity of F10SC (B/N 050506 and B/N 211)

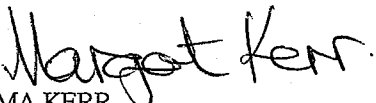
| Sample | Dilution | Contact time | Serial dilution | Percentage kill of | |
|---------------------------------|----------|--------------|------------------|---------------------------|------------|
| | | | | <i>B. subtilis</i> spores | |
| | | | | 13/10/2004 | 19/10/2004 |
| F10SC B/N 050506 (X38022) | 1/100 | 5min | Direct | 99,74 | 99,80 |
| | | | 10 ⁻¹ | 99,86 | 99,98 |
| | | | 10 ⁻² | 99,99 | 99,99 |
| | | | 10 ⁻³ | 99,99 | 99,99 |
| F10SC B/N 211 (X38023) | 1/100 | 5 min | Direct | 99,97 | 99,97 |
| | | | 10 ⁻¹ | 99,99 | 99,99 |
| | | | 10 ⁻² | 99,99 | 99,99 |
| | | | 10 ⁻³ | 99,99 | 99,99 |

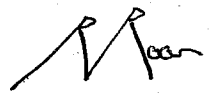
Spore suspension:

Initial spore suspension count - $2,85 \times 10^6$ cfu /ml (within the requirement)

Conclusion:

Sporicidal activity for specific purpose is characterized by the concentration of the test product for which criteria are met for which a 10³ (99,9%) or more reduction in viability is demonstrated under required test conditions.


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