



**Henkel AG & Co. KGaA**  
Microbiology

**Test report**

21-06176-4

on the  
microbicidal surface efficacy without mechanical action

of

**Active Anolyte**

**according to the principles of DIN EN 13697**

*Chemical disinfectants and antiseptics – Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas – Test method and requirements without mechanical action (phase 2, step 2); German version EN 13697:2015+A1:2019*

with parameters adjusted to

**Method 14.1.: Surface disinfection without mechanical action,**

*Requirements and methods for the VAH certification of chemical disinfectants (Status April 2015), ("Anforderungen und Methoden zur VAH-Zertifizierung chemischer Desinfektionsverfahren")*

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Elements of Water GmbH

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Date: September 29, 2021

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### 1. Test laboratory

Henkel AG & Co. KGaA  
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D-40191 Düsseldorf

### 2. Identity of the test substance

2.1. Product name	<b>Active Anolyte</b>
2.2 Batch	lot no AA44382-01
2.3 Manufacturing date	unknown
2.4 Manufacturer	Elements of Water GmbH
2.5 Date of sample entry	July 07, 2021
2.6 Expiry date	January 2022
2.6 Active substance(s)	Active chlorine released from hypochlorous acid
2.7 Storage conditions in the laboratory	2 - 8 °C
2.8 Appearance	clear, colourless liquid
2.9 Physical parameters	(before/after test)
2.9.1 Active chlorine:	455 ppm / 440 ppm
2.9.2 pH:	6.90 / 6.04
2.9.3 Redox potential:	912 mV / 980 mV

### 3. Test method

#### 3.1 Surface test according to the principles of DIN EN 13697:

Chemical disinfectants and antiseptics – Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas – Test method and requirements without mechanical action (phase 2, step 2); German version EN 13697:2015+A1:2019

Scope of application:

Efficacy testing of disinfectants in chemical products including industrial, domestic and institutional areas, food, veterinary medicine and hospital hygiene

(with the exception: no testing and statements of conformity of medical devices)

Test parameters have been adjusted to the requirements of 14.1 (Surface disinfection without mechanical action – simulated-use test in: Requirements and methods for the VAH certification of chemical disinfection processes (2015-04)), as follows:

The test organisms have been chosen according to the requirements of VAH 14.1.

Contact times of 1 and 5 min have been applied instead of 3 concentrations per contact time as prescribed in DIN EN 13697.

In order to be able to demonstrate reduction factors of  $\geq 5\lg$  a 10fold higher inoculum has been used compared to EN13697 for gram-positive bacteria and 0.2% Glycerol have been added to the inoculum of *P. aeruginosa*.

Two consecutive runs have been performed as prescribed in VAH 14.1.

### 3.2 Neutralization by: dilution-neutralization

Neutralizer solution based on:

3% Tween 80, 0.3% Lecithin, 0.1% Histidin, 0.5% Sodium thiosulphate

## 4. Experimental conditions

4.1	Date of test:	July 30 – August 19, 2021
4.2	Diluent:	distilled water
4.3	Test concentrations:	100% - 25 / 20%
4.4	Appearance of the test dilutions:	clear, colourless, liquid
4.5	Test organisms:	<i>Staphylococcus aureus</i> DSM 799 (=ATCC 6538) <i>Enterococcus hirae</i> DSM 3320 (=ATCC 10541) <i>Pseudomonas aeruginosa</i> DSM 939 (=ATCC 15442) <i>Candida albicans</i> DSM 1386 (=ATCC 10231)
4.6	Contact time(s):	1 min – 5 min
4.7	Test temperature:	room temperature
4.8	Interfering substance:	0.3g/l BSA (low soil)
4.9	Incubation temperature:	36° bacteria, 30° yeast

## 5. Results

An overview of the achieved reduction factors is given in the table below. Detailed test results are illustrated in the appendix.

The non-interference of the chosen experimental conditions, the absence of toxicity of the selected neutralizer solution as well as the successful validation of the dilution –neutralization method was proven. Thus, the results can be regarded as sufficiently valid.

EN 13697 1 <sup>st</sup> run		Active Anolyte	
Parameters Low soil (0.3 g/l BSA), room temperature		Reduction factors / Water controls	
	Contact time ► Concentration ▼	1 min	5 min
<i>Staphylococcus aureus</i> DSM 799 (=ATCC 6538)	Water Control	7.99	7.99
	20%	<2.47	nt
	100 %	4.86	>5.84
<i>Enterococcus hirae</i> DSM 3320 (=ATCC 10541)	Water Control	7.63	7.51
	20%	<2.11	nt
	100 %	2.40	>5.36
<i>Pseudomonas aeruginosa</i> DSM 939 (=ATCC 15442)	Water Control	7.28	7.37
	20%	<1.76	nt
	100 %	3.86	>5.22
<i>Candida albicans</i> DSM 1386 (=ATCC 10231)	Water Control	6.29	6.22
	20%	<0.77	nt
	100 %	>4.14	>4.07

EN 13697, 2 <sup>nd</sup> run		Active Anolyte	
Parameters Low soil (0.3 g/l BSA), room temperature		Reduction factors / Water controls	
	Contact time ► Concentration ▼	5 min	5 min
<i>Enterococcus hirae</i> DSM 3320 (=ATCC 10541)	Water Control	7.40	7.36
	∅ Water control	7.38	
	25%	<1.86	<1.86
	100 %	>5.23	>5.23
<i>Pseudomonas aeruginosa</i> DSM 939 (=ATCC 15442)	Water Control	7.15	7.28
	∅ Water control	7.22	
	25%	<1.70	<1.70
	100 %	>5.07	>5.07
<i>Candida albicans</i> DSM 1386 (=ATCC 10231)	Water Control	6.32	6.35
	∅ Water control	6.34	
	25%	1.18	1.22
	100 %	>4.19	>4.19

## 6. Conclusion

In the standard DIN EN 13697 the minimum requirements for efficacy of a disinfectant are defined as the capability to reduce the viable counts of the prescribed test organisms by a factor of  $\geq 4$ lg for bacteria and of  $\geq 3$ lg for yeast and fungi at the intended product concentration within the defined contact time and under the influence of the chosen level of interfering substances.

According to the requirements of VAH 14.1. for surface disinfection without mechanical action a reduction of  $\geq 5$  lg for bacteria and  $\geq 4$  for yeast is required. In order to be able to demonstrate these reduction factors, inoculum concentrations had to be adjusted accordingly.

Test organisms have been chosen based on the requirements of VAH 14.1.

Based on the results of the first run *E. hirae* as the most resistant gram-positive bacterium and *P. aeruginosa* have been chosen for the second run, in addition to the yeast *C. albicans*.

For the product **Active Anolyte** a **sufficiently microbicidal efficacy** against the chosen test organisms could be achieved at room temperature and simulated low soil conditions within 5 min at undiluted (=100%) product concentration.

Duesseldorf, September 29, 2021

Dr. Roland Breves  
Head of Microbiology

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Head of lab Product Efficacy

Sampling was performed by the customer (if not described otherwise). All results refer only to the samples provided by the customer. A copy of the original signed version of this report and the raw data are filed at Corporate Scientific Services / Microbiology for a storage period of 10 years. The report may only be distributed in complete form without any changes.

**Appendix: Detailed test results**

### Appendix: Test results, validation and controls

#### Microbicidal efficacy EN 13697 – 1<sup>st</sup> run:

DIN EN 13697:2019	Sample 21-06176/2	Room temperature	Soil: low (0.03% BSA)	Active Analyte			
Test organism	Validation and controls				Product tests (5.5.2.1), test concentration in %		
	Testsuspension N (5.4.1.3)	Verification of the absence of toxicity of the neutralizer NC (5.5.2.3)	Validation of the dilution- neutralization method NT (5.5.2.4)	Water control Nc (5.5.2.2)	100%	20%	
<i>Staphylococcus aureus</i> DSM 799 (=ATCC 6538)	V <sub>c-7</sub> : >330/>330 V <sub>c-8</sub> : 45/44 N: 4.45x10 <sup>9</sup> <b>lg N: 8.05</b> [x]yes [ ]no	5 min V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 111/ 91 V <sub>c-6</sub> : 13/ 12 NC: 1.01x10 <sup>8</sup> <b>lg NC: 8.00</b> [x]yes [ ]no	5 min V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 90/ 82 V <sub>c-6</sub> : 9/ 7 NT: 8.60x10 <sup>7</sup> <b>lg NT: 7.93</b> [x]yes [ ]no	1 min V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 101/ 96 V <sub>c-6</sub> : 6/ 9  Nc: 9.85x10 <sup>7</sup> <b>lg Nc: 7.99</b>	V <sub>c0</sub> : 124/140 V <sub>c-1</sub> : 16/ 18 V <sub>c-2</sub> : 4/ 2 N <sub>d</sub> : 1.35x10 <sup>3</sup> lg N <sub>d</sub> : 3.13 R: 4.86 N <sub>ts</sub> : 1	1 min 124/140 >330/>330 >330/>330 >330/>330 3.30x10 <sup>5</sup> >5.52 <2.47 86	
				5 min V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 103/ 94 V <sub>c-6</sub> : 3/ 13  Nc: 9.85x10 <sup>7</sup> <b>lg Nc: 7.99</b>	V <sub>c0</sub> : 0/0 V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >5.84 N <sub>ts</sub> : 0	5 min 0/0 0/0 0/0 nd <2.15 >5.84 0	
<i>Enterococcus hirae</i> DSM 3320 (=ATCC 10541)	V <sub>c-7</sub> : 185/ 224 V <sub>c-8</sub> : 21/ 29 N: 2.09x10 <sup>9</sup> <b>lg N: 7.72</b> [x]yes [ ]no	5 min V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 42/ 30 V <sub>c-6</sub> : 5/ 4 NC: 3.60x10 <sup>7</sup> <b>lg NC: 7.56</b> [x]yes [ ]no	5 min V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 46/ 50 V <sub>c-6</sub> : 2/ 3 NT: 4.80x10 <sup>7</sup> <b>lg NT: 7.68</b> [x]yes [ ]no	1 min V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 45/ 40 V <sub>c-6</sub> : 2/ 3  Nc: 4.25x10 <sup>7</sup> <b>lg Nc: 7.63</b>	V <sub>c0</sub> : >330/>330 V <sub>c-1</sub> : >330/>330 V <sub>c-2</sub> : 156/184 N <sub>d</sub> : 1.70x10 <sup>5</sup> lg N <sub>d</sub> : 5.23 R: 2.40 N <sub>ts</sub> : 22	1 min >330/>330 >330/>330 >330/>330 >330/>330 3.30x10 <sup>5</sup> >5.52 <2.11 61	
				5 min V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 30/ 35 V <sub>c-6</sub> : 3/ 1  Nc: 3.25x10 <sup>7</sup> <b>lg Nc: 7.51</b>	V <sub>c0</sub> : 1/3 V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >5.36 N <sub>ts</sub> : 4	5 min 1/3 0/0 0/0 nd <2.15 >5.36 4	

## Legend:

V <sub>c-x</sub> :	Cell counts in a defined decadic dilution x
N:	Cell counts in the test suspension
N <sub>d</sub> :	Cell counts in the test assays
Nc:	Cell counts in the water control
NC:	Cell counts in the neutralizer control (absence of toxicity)
NT:	Cell counts in the validation of the neutralization method
N <sub>ts</sub> :	Cell counts remaining on carrier
R:	Reduction factor
nd:	not determined

## Criteria of validity:

Lg N:	7.57 – 8.10 for bacteria (modified, acc. to VAH 14.1) 6.57 – 7.10 for <i>C. albicans</i> (modified, acc. to VAH 14.1)
NC - Nc:	≤± 0.3 lg
NT - Nc:	≤± 0.3 lg
N <sub>ts</sub> :	<100 cfu (for active concentrations)

DIN EN 13697:2019	Sample 21-06176/2	Room temperature	Soil: low (0.03% BSA)	Active Analyte			
Test organism	Validation and controls				Product tests (5.5.2.1), test concentration in %		
	Testsuspension N (5.4.1.3)	Verification of the absence of toxicity of the neutralizer NC (5.5.2.3)	Validation of the dilution- neutralization method NT (5.5.2.4)	Water control Nc (5.5.2.2)		100%	20%
<i>Pseudomonas aeruginosa</i> DSM 939 (=ATCC 15442)	V <sub>c-7</sub> :>330/>330 V <sub>c-8</sub> : 31/42 N: 3.65x10 <sup>9</sup> lg N: 7.96 [x]yes [ ]no	5 min V <sub>c-3</sub> :>330/>330 V <sub>c-4</sub> : 266/ 282 V <sub>c-5</sub> : 31/ 31 V <sub>c-6</sub> : 4/ 2 NC: 2.77x10 <sup>7</sup> lg NC: 7.44 [x]yes [ ]no	5 min V <sub>c-3</sub> :>330/>330 V <sub>c-4</sub> : 131/ 146 V <sub>c-5</sub> : 14/ 12 V <sub>c-6</sub> : 1/ 3 NT: 1.39x10 <sup>7</sup> lg NT: 7.14 [x]yes [ ]no	1 min V <sub>c-3</sub> :>330/>330 V <sub>c-4</sub> : 204/ 170 V <sub>c-5</sub> : 21/ 28 V <sub>c-6</sub> : 2/ 5 Nc: 1.92x10 <sup>7</sup> lg Nc: 7.28	V <sub>c0</sub> : V <sub>c-1</sub> : V <sub>c-2</sub> : N <sub>d</sub> : lg N <sub>d</sub> R: N <sub>ts</sub> :	1 min 240/280 28/ 38 3/ 2 2.66x10 <sup>3</sup> 3.42 3.86 0	1 min >330/>330 >330/>330 >330/>330 >3.30x10 <sup>5</sup> >5.52 <1.76 6
				5 min V <sub>c-3</sub> :>330/>330 V <sub>c-4</sub> : 217/ 245 V <sub>c-5</sub> : 31/ 25 V <sub>c-6</sub> : 2/ 2 Nc: 2.35x10 <sup>7</sup> lg Nc: 7.37	V <sub>c0</sub> : V <sub>c-1</sub> : V <sub>c-2</sub> : N <sub>d</sub> : lg N <sub>d</sub> R: N <sub>ts</sub> :	5 min 0/0 0/0 0/0 <1.40x10 <sup>2</sup> <2.15 >5.22 0	nd
<i>Candida albicans</i> DSM 1386 (=ATCC 10231)	V <sub>c-6</sub> :>330/>330 V <sub>c-7</sub> : 31/ 35 N: 3.30x10 <sup>8</sup> lg N: 6.92 [x]yes [ ]no	5 min V <sub>c-2</sub> :>330/>330 V <sub>c-3</sub> : 104/ 122 V <sub>c-4</sub> : 7/ 9 V <sub>c-5</sub> : 2/ 0 NC: 1.13x10 <sup>6</sup> lg NC: 6.05 [x]yes [ ]no	5 min V <sub>c-2</sub> :>330/>330 V <sub>c-3</sub> : 102/ 93 V <sub>c-4</sub> : 10/ 12 V <sub>c-5</sub> : 0/ 4 NT: 9.75x10 <sup>5</sup> lg NT: 5.99 [x]yes [ ]no	1 min V <sub>c-2</sub> :>330/>330 V <sub>c-3</sub> : 208/ 178 V <sub>c-4</sub> : 23/ 23 V <sub>c-5</sub> : 3/ 1 Nc: 1.96x10 <sup>6</sup> lg Nc: 6.29	V <sub>c0</sub> : V <sub>c-1</sub> : V <sub>c-2</sub> : N <sub>d</sub> : lg N <sub>d</sub> R: N <sub>ts</sub> :	1 min 5/3 0/0 0/0 <1.40x10 <sup>2</sup> <2.15 >4.14 0	1 min >330/>330 >330/>330 >330/>330 >3.30x10 <sup>5</sup> >5.52 <0.77 >150
				5 min V <sub>c-2</sub> :>330/>330 V <sub>c-3</sub> : 164/ 156 V <sub>c-4</sub> : 30/ 25 V <sub>c-5</sub> : 3/ 0 Nc: 1.66x10 <sup>6</sup> lg Nc: 6.22	V <sub>c0</sub> : V <sub>c-1</sub> : V <sub>c-2</sub> : N <sub>d</sub> : lg N <sub>d</sub> R: N <sub>ts</sub> :	5 min 0/0 0/0 0/0 <1.40x10 <sup>2</sup> <2.15 >4.07 0	nd

## Test results, validation and controls – microbicidal efficacy EN 13697 – 2nd run:

DIN EN 13697:2019	Sample 21-06176/2	Room temperature	Soil: low (0.03% BSA)	Active Analyte			
Test organism	Validation and controls					Product tests (5.5.2.1), test concentration in %	
	Testsuspension N (5.4.1.3)	Verification of the absence of toxicity of the neutralizer NC (5.5.2.3)	Validation of the dilution- neutralization method NT (5.5.2.4)	Water control Nc (5.5.2.2)		100%	25%
<i>Enterococcus hirae</i> DSM 3320 (=ATCC 10541)	V <sub>c-7</sub> : 159/ 175 V <sub>c-8</sub> : 16/ 20 N: 1.68x10 <sup>9</sup> lg N: 7.62 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 43/ 35 V <sub>c-6</sub> : 4/ 5 NC: 3.90x10 <sup>7</sup> lg NC: 7.59 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 220/ 230 V <sub>c-5</sub> : 29/ 27 V <sub>c-6</sub> : 4/ 1 NT: 2.30x10 <sup>7</sup> lg NT: 7.36 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 262/ 224 V <sub>c-5</sub> : 35/ 27 V <sub>c-6</sub> : 3/ 6 Nc: 2.49x10 <sup>7</sup> lg Nc: 7.40	V <sub>c0</sub> :	<b>Parallel 1</b> 0/0	<b>Parallel 1</b> >330/>330
		V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >5.23 N <sub>ts</sub> : 8	>330/>330 >330/>330 >330/>330 >3.30x10 <sup>5</sup> >5.52 <1.86	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : >330/>330 V <sub>c-5</sub> : 32/ 44 V <sub>c-6</sub> : 6/ 3 NC: 3.80x10 <sup>7</sup> lg NC: 7.58 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 196/ 218 V <sub>c-5</sub> : 17/ 23 V <sub>c-6</sub> : 2/ 2 NC: 2.06x10 <sup>7</sup> lg NT: 7.31 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 229/ 224 V <sub>c-5</sub> : 24/ 30 V <sub>c-6</sub> : 4/ 1 Nc: 2.30x10 <sup>7</sup> lg Nc: 7.36 ØlgNc = 7.38	V <sub>c0</sub> :
<i>Pseudomonas aeruginosa</i> DSM 939 (=ATCC 15442)	V <sub>c-7</sub> : >330/>330 V <sub>c-8</sub> : 45/49 N: 4.70x10 <sup>9</sup> lg N: 8.07 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 166/ 159 V <sub>c-5</sub> : 15/ 14 V <sub>c-6</sub> : 3/ 5 NC: 1.61x10 <sup>7</sup> lg NC: 7.21 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 190/ 189 V <sub>c-5</sub> : 12/ 19 V <sub>c-6</sub> : 2/ 2 NT: 1.90x10 <sup>7</sup> lg NT: 7.28 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 158/ 128 V <sub>c-5</sub> : 15/ 8 V <sub>c-6</sub> : 3/ 1 Nc: 1.42x10 <sup>7</sup> lg Nc: 7.15	V <sub>c0</sub> :	<b>Parallel 1</b> 2/9	<b>Parallel 1</b> >330/>330
		V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >5.07 N <sub>ts</sub> : 5	>330/>330 >330/>330 >330/>330 >3.30x10 <sup>5</sup> >5.52 <1.70	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 147/ 161 V <sub>c-5</sub> : 16/ 13 V <sub>c-6</sub> : 0/ 1 NC: 1.54x10 <sup>7</sup> lg NC: 7.18 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 145/ 158 V <sub>c-5</sub> : 14/ 14 V <sub>c-6</sub> : 3/ 1 NT: 1.50x10 <sup>7</sup> lg NT: 7.17 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : >330/>330 V <sub>c-4</sub> : 190/ 188 V <sub>c-5</sub> : 22/ 22 V <sub>c-6</sub> : 7/ 3 Nc: 1.92x10 <sup>7</sup> lg Nc: 7.28 ØlgNc = 7.22	V <sub>c0</sub> :
<i>Candida albicans</i> DSM 1386 (=ATCC 10231)	V <sub>c-6</sub> : >330/>330 V <sub>c-7</sub> : 32/ 41 N: 3.6510 <sup>8</sup> lg N: 6.96 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : 210/ 214 V <sub>c-4</sub> : 20/ 30 V <sub>c-5</sub> : 5/ 6 V <sub>c-6</sub> : 0/ 0 NC: 2.15x10 <sup>6</sup> lg NC: 6.33 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : 194/ 219 V <sub>c-4</sub> : 28/ 33 V <sub>c-5</sub> : 7/ 2 V <sub>c-6</sub> : 1/ 0 NT: 2.16x10 <sup>6</sup> lg NT: 6.33 [x]yes [ ]no	<b>Parallel 1</b> V <sub>c-3</sub> : 194/ 225 V <sub>c-4</sub> : 24/ 20 V <sub>c-5</sub> : 3/ - V <sub>c-6</sub> : 0/ 0 Nc: 2.10x10 <sup>6</sup> lg Nc: 6.32	V <sub>c0</sub> :	<b>Parallel 1</b> 0/0	<b>Parallel 1</b> >330/>330
		V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >4.19 N <sub>ts</sub> : 0	161/ 125 1.43x10 <sup>5</sup> 5.16 1.18 27	<b>Parallel 2</b> V <sub>c-3</sub> : 186/ 202 V <sub>c-4</sub> : 22/ 16 V <sub>c-5</sub> : 1/ 6 V <sub>c-6</sub> : 0/ 1 NC: 1.94x10 <sup>6</sup> lg NC: 6.29 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : 214/ 199 V <sub>c-4</sub> : 20/ 20 V <sub>c-5</sub> : 4/ 1 V <sub>c-6</sub> : 0/ 2 NT: 2.06x10 <sup>6</sup> lg NT: 6.31 [x]yes [ ]no	<b>Parallel 2</b> V <sub>c-3</sub> : 226/ 229 V <sub>c-4</sub> : 23/ 18 V <sub>c-5</sub> : 1/ 3 V <sub>c-6</sub> : 0/ 0 Nc: 2.25x10 <sup>6</sup> lg Nc: 6.35 ØlgNc = 6.34	V <sub>c0</sub> :
					V <sub>c-1</sub> : 0/0 V <sub>c-2</sub> : 0/0 N <sub>d</sub> : <1.40x10 <sup>2</sup> lg N <sub>d</sub> : <2.15 R: >4.19 N <sub>ts</sub> : 2	<b>Parallel 2</b> 0/0	<b>Parallel 2</b> >330/>330
							130/ 135 1.33x10 <sup>5</sup> 5.12 1.22 18