

HYGIENE NORD GMBH, C/O BIOTECHNIKUM, W.-RATHENAU-STR. 49 A, D-17489 GREIFSWALD

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CUSTOMER NUMBER
2503

DATE
March 31, 2025

REPORT 250704.V3

**ONESPRAY ALCOHOL BASED FAST ACTING SPRAY
DISINFECTANT FOR MEDICAL EQUIPMENT**

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**ONESPRAY WIPES ALCOHOL BASED FAST ACTING
DISINFECTANT WIPES FOR MEDICAL DEVICES**

**YEASTICIDAL ACTIVITY AGAINST *CANDIDA AURIS*
EN 13624 (2021)**

This **version 03** of the report replaces the Hygiene Nord GmbH test report 250707.V2, Version 02, dated March 19, 2025, and corrects mistakes in one of the product names on page 2.
The efficacy claim remains unchanged.

Purpose

The yeasticidal activity of the surface disinfectant **ONESPRAY Wipes Alcohol Based Fast Acting Disinfectant Wipes for Medical Devices** (KAF GRUP SAĞLIK HİZMETLERİ İNŞ. SAN. VE TİC. LTD. ŞTİ., Istanbul, Turkey) should be evaluated in accordance with the European Standard **EN 13624 (2021)** against the test organism *C. auris*.

The test product **ONESPRAY Alcohol Based Fast Acting Spray Disinfectant for Medical Equipment** is the soaking liquid of the surface disinfection wipes **ONESPRAY Wipes Alcohol Based Fast Acting Disinfectant Wipes for Medical Devices**. Extraction of that liquid directly from the wipes provided did not produce a sufficiently high volumen for the EN 13624 quantitative suspension tests presented herein. Therefore, these tests were directly performed with the soaking liquid **ONESPRAY Alcohol Based Fast Acting Spray Disinfectant for Medical Equipment**.

Test description

| | | |
|-----------------------------------|---|--|
| Order number: | A25-0216 | |
| Manufacturer: | KAF GRUP SAĞLIK HİZMETLERİ İNŞ. SAN. VE TİC. LTD. ŞTİ., Istanbul, Turkey | |
| Product: | ONESPRAY Wipes Alcohol Based Fast Acting Disinfectant Wipes for Medical Equipment | ONESPRAY Alcohol Based Fast Acting Spray Disinfectant for Medical Equipment |
| Batch number: | ONCR25013001 | ONCR25013001 |
| Sample number: | P251299 | P251298 |
| Date of manufacture: | 30.01.2025 | 30.01.2025 |
| Best before: | 30.01.2027 | 30.01.2027 |
| Date of order: | February 06, 2025 | February 06, 2025 |
| Date of delivery: | February 06, 2025 | February 06, 2025 |
| Storage condition: | room temperature | room temperature |
| pH – value (pH-meter): | - | 100 %: 5.71 80 %: 5.40 50 %: 5.00 10 %: 4.74 WFI: 5.70 |
| Diluent: | water for injections | |
| Test date: | February 14, 2025 – March 05, 2025 | |
| Basis: | EN 13624 (2021: Version 08/2022): Chemical disinfectants and antiseptics – quantitative suspension test for the evaluation of fungicidal or yeasticidal in the medical area – test method and requirements (phase 2, step 1) | |
| Test organism ¹ : | <i>Candida auris</i> DSM 21092 | |
| Test solutions: | 97 %, 80 %, 40 %, 10 %, 1 % and 0.1 % | |
| Active ingredients ¹ : | 30 % Ethanol, 10 % 2-Propanol 0.25 % Didecylmethylpoly(oxethyl) Ammonium Propionate | |
| Odour: | product specific | |
| Appearance of powder: | clear, colourless liquid | |
| Appearance of dilutions: | clear, colourless liquids | |
| Neutralizer: | 4 % Tween 80 + 3 % Saponin + 0.4 % Lecithin + 0.25 % SDS (neutralizer XXIV) | |
| Contact time(s): | 30 s | |
| Interfering substance: | 0.03 % albumin (clean conditions) | |
| Test temperature: | 20 ± 1 °C | |
| Incubation temperature: | 30 ± 1 °C | |
| Nutrient medium: | yeast extract agar | |

Test Method

Testing is based on the European Standard **EN 13624 (2021)**. Validation and control procedures are therefore carried out in accordance with this standard, too.

In deviation to the EN 13624 standard strains and in accordance to the customer's request the yeast *Candida auris* is used as test strain.

For the test, to a sample of the product **ONESPRAY Alcohol Based Fast Acting Spray Disinfectant for Medical Equipment** (diluted with water for injections) is added to a suspension of test organisms in a solution of the interfering substance. The mixture is maintained at 20 ± 1 °C for the required contact time. At the end of the contact time, an aliquot of 1 ml is taken; the microbicidal activity in this portion is immediately neutralized. Two 1 ml samples (per dilution step) of the resulting suspension are spread on at least 2 plates each. The number of surviving test organisms in the test mixture is calculated for each sample and the reduction is determined with respect to the corresponding test suspension N_0 .

The experimental conditions (control A), the non-toxicity of the neutralizer (control B) and the dilution-neutralization method (control C) are validated in accordance with the EN 13624. The test is performed under clean conditions (0.03 % albumin). Results are presented in table 1 – 2.

Results and conclusion²

In accordance with the **EN 13624 (2021)**, the batch ONCR25013001 of the test product **ONESPRAY Wipes Alcohol Based Fast Acting Disinfectant Wipes for Medical Equipment / ONESPRAY Alcohol Based Fast Acting Spray Disinfectant for Medical Equipment**, when applied at the concentration / contact time - relation of at least **50 % / 30 s** at 20 ± 1 °C under clean conditions (0.03 % albumin), **possesses yeasticidal efficacy** ($\log_{10} RF \geq 4$) for the reference strain *C. auris* (Tab. 1 - 2).

Results are considered validated in accordance with the requirements of the **EN 13624 (2021)**.

Greifswald, March 31, 2025


Dr. rer. med. (Dipl. Biol.) T. Koburger-Janssen
- General Manager -


Prof. Dr. med. A. Kramer
- MD for Hygiene and Environmental Medicine -



Table 1: Results of the quantitative suspension test according to EN 13624 (2021)

Date: February 21, 2025 **Order number:** A25-0216
Product: ONESPRAY Alcohol Based Fast Acting **Sample number:** P251298
Spray Disinfectant for Medical Equipment
Test organism: *C. auris* **Batch number:** ONCR25013001
Interfering substance: 0.03 % albumin
Incubation temperature: 30 ± 1 °C **Neutralizer:** XXIV
Test suspension (N₀): 4.61*10⁶ cfu/ml (6.66 log) **Incubation time:** 72 h
Validation Suspension (N_V): 1.12*10⁴ cfu/ml (4.05 log) **Test temperature:** 20 ± 1 °C
Validation Suspension (N_{VB}): 1.36*10⁵ cfu/ml (5.13 log)

| Test suspension (N): | dilution | V _{c1} | V _{c2} | N (cfu / ml) | log ₁₀ (N) |
|---|-------------------------|-----------------|-----------------|-----------------|-----------------------|
| N ≥ 1.5x10 ⁷ ≤ 5.0x10 ⁷ cfu/ml? | 0.1 ml 10 ⁻³ | 330 | 330 | | |
| <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | 0.1 ml 10 ⁻⁴ | <u>450</u> | <u>435</u> | 4.61E+07 | 7.66 |
| | 0.1 ml 10 ⁻⁵ | <u>63</u> | <u>67</u> | | |

| contact time: <u>30 s</u> | | | | | | | | | |
|---------------------------|--------------------------|---------------|---------------|---------------|---------------|-----------------|-----------------|----------------------|---------------------|
| concentration | dilution | cfu / plate 1 | cfu / plate 2 | cfu / plate 3 | cfu / plate 4 | V _{c1} | V _{c2} | log ₁₀ Na | log ₁₀ R |
| 80 % | 1 ml (10 ⁰) | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>≤ 14</u> | <u>≤ 14</u> | < 2.15 | > 4.52 |
| | 1 ml (10 ⁻¹) | 5 | 2 | 3 | 4 | < 14 | < 14 | | |
| 50 % | 1 ml (10 ⁰) | <u>3</u> | <u>1</u> | <u>2</u> | <u>2</u> | <u>≤ 14</u> | <u>≤ 14</u> | < 2.15 | > 4.52 |
| | 1 ml (10 ⁻¹) | 0 | 0 | 0 | 0 | < 14 | < 14 | | |
| 10 % | 1 ml (10 ⁰) | <u>51</u> | <u>23</u> | <u>35</u> | <u>45</u> | <u>74</u> | <u>80</u> | 3.02 | 3.64 |
| | 1 ml (10 ⁻¹) | <u>22</u> | <u>20</u> | <u>18</u> | <u>16</u> | <u>42</u> | <u>34</u> | | |

Controls and validation:

| Validation - Suspension (N _{vo}) | | | | Experimental condition control (A) | | | | Neutralizer control (B) | | | | Method validation (C) Product concentration: 80 % | | | | | | | |
|---|-------------------|----------------|-----------|---|-------------------|----------------|-----------|---|-------------------|-----------------|-----------|---|-------------------|----------------|-----------------|----|----|-----|--------------|
| | cfu / plate 1 & 2 | V _c | \bar{X} | | cfu / plate 1 & 2 | V _c | \bar{X} | | cfu / plate 1 & 2 | V _c | \bar{X} | | cfu / plate 1 & 2 | V _c | \bar{X} | | | | |
| V _{c1} | 83 | 77 | 160 | 152.5 | V _{c1} | 81 | 71 | 152 | 151 | V _{c1} | 81 | 76 | 157 | 154.5 | V _{c1} | 88 | 75 | 163 | 161.5 |
| V _{c2} | 70 | 75 | 145 | | V _{c2} | 73 | 77 | 150 | | V _{c2} | 74 | 78 | 152 | | V _{c2} | 78 | 82 | 160 | |
| 30 ≤ \bar{X} of N _{vo} ≤ 160? | | | | \bar{X} of A is ≥ 0.5 \bar{X} of N _{vo} ? | | | | \bar{X} of B is ≥ 0.0005 \bar{X} of N _{vb} ? | | | | \bar{X} of C is ≥ 0.5 \bar{X} of N _{vo} ? | | | | | | | |
| <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | | | | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | | | | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | | | | <input checked="" type="checkbox"/> yes <input type="checkbox"/> no | | | | | | | |

Legend:

| | | |
|-----------|---|--|
| 1 | = | as provided by the sponsor / manufacturer (unless stated otherwise) |
| 2 | = | According to EN 17025, § 7.8.2.1 I, we are required to state that the results presented in this report relate to the item(s) tested only. That is quite obvious in the first place, anyway. And it is also ridiculous, of course, with regard to these tests and reports typically being used for a product's generalized efficacy evaluation and market authorization. Which, as such, is then fully acceptable by all other relevant authorizing and responsible parties (other than EN 17025), too. Which therefore is why this disclaimer is only to be found at the very back end of this report. |
| \bar{x} | = | average value |
| RF | = | reduction factor |
| > 330 | = | not countable |
| > 660 | = | not countable |
| n.a. | = | not applicable |
| n.d. | = | not determined |
| n.p. | = | not provided |
| WFI | = | water for injections |
| WSH | = | water of standardized hardness |