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Sasson Industries
Industrial Park, Kidmat Galil, Hazor St.
IL -

Hamburg, 15 October 2020

Expert opinion

Yeasticidal Activity of **Vega wipes General Cleaning and disinfecting wet wipes** in the quantitative suspension test according to DIN EN 1650:2019 (Phase 2, Step 1)

The disinfectant **Vega wipes General Cleaning and disinfecting wet wipes** was tested and evaluated according to DIN EN 1650:2019 „Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas – Test method and requirements (phase 2, step 1)".

According to the test report no. L20/1165.2 dated 15/10/2020 of Dr. Brill + Partner GmbH the preparation showed yeasticidal activity under dirty conditions.

Vega wipes General Cleaning and disinfecting wet wipes complies with the requirements of DIN EN 1650:2019 (phase 2, step 1) with the following concentration-time relationship:

Yeasticidal:	**dirty conditions**	**100 %**	**5 minutes**

Dr. Florian H. H. Brill

Test report no L20/1165.2

Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of **Vega wipes General Cleaning and disinfecting wet wipes** in Food, Industrial, Domestic and Institutional Areas according to DIN EN 1650:2019 (Phase 2, step 1)*

In accordance with your order, we tested the preparation **Vega wipes General Cleaning and disinfecting wet wipes** for its activity in the quantitative suspension test according to DIN EN 1650:2019* under dirty conditions.

1 General Information and Material

1.1 Client

Client:	Sasson Industries, Mr Bobby Wechsler, Industrial Park, Kidmat Galil, Hazor St., IL -
Date of order:	07/08/2020
Confirmation no.:	217273

1.2 Identification of Test Laboratory

Location:	Dr. Brill + Partner GmbH · Institute for Hygiene and Microbiology, Stiegstück 34, DE-22339 Hamburg, Germany
Study manager:	Dipl.-Ing. Dr. rer. nat. Andreas Kampe
Scientific assistant:	Dipl.-Biol. Dr. rer. nat. Jan-Hendrik Klock
Laboratory technicians:	Carmela Jänicke

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1.4 Identification of Sample

Name of product:	**Vega wipes General Cleaning and disinfecting wet wipes**

Batch no.:	-
Manufacturer:	Sasson Industries
Date of delivery:	23/07/2020
Storage conditions:	room temperature and darkness
Appearance of product:	clear liquid
Odour:	characteristic
Recommended diluent:	Product is ready for use
Diluent used:	distilled water (DW, pH 7.0)
pH value, undiluted:	7.0
pH value, 80 % (measured in diluent):	7.2
pH value, 50 % (measured in diluent):	7.1
pH value, 10 % (measured in diluent):	6.3
Active agents (Manufacturer's data):	0 – 2.5 % Alkyl Dimethyl Benzyl Ammonium Chloride
	0 – 2.5 % Alkyl Dimethyl Ethylbenzyl Ammonium Chloride

1.5 Test Conditions

Test period:	01/10/ -05/10/2020
Lab task no.:	L20/1165.2
Product test concentrations:	10 + 50 + 80 %
Exposure time:	5 minutes
Test temperature:	20°C ± 1°C
Incubation temperature:	30°C ± 1°C
Organic load:	dirty conditions (3.0 g/L bovine albumin)
Neutraliser:	60 g/L polysorbate 80, 60 g/L saponine, 8 g/L lecithin,1 g/L histidine, 25 g/L sodium dodecyl sulphate (TLSH-SDS)
Test organisms:	*Candida albicans* ATCC 10231

2 Methods

The tests were carried out according to DIN EN 1650:2019 „Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas – Test method and requirements (phase 2, step 1)".

3 Results

The test results based on DIN EN 1650: 2013 are summarised in tables 1 and 2.

The test fungi were sufficiently (RF >4) inactivated with the following concentration-time relationship:

Yeasticidal:	dirty conditions	50 %	5 minutes

Hamburg, 15/10/2020

Dipl.-Ing. Dr. rer. nat. Andreas Kampe	Dipl.-Biol. Dr. rer. nat. Jan-Hendrik Klock
Study Manager	Deputy Head of Laboratory

Table 1: Validation, Controls and Evaluation

Product name:	**Vega wipes General Cleaning and disinfecting wet wipes**	Batch:	-
Test organism:	*Candida albicans*	Temperature:	20°C ± 1°C
Organic load:	dirty conditions	Neutraliser:	TLSH-SDS
Contact time:	**5 minutes**		

Suspension for Validation (N_{v0})				Control of test conditions (**A**)											
				n.t.				5 minutes				n.t.			
	Microbial count		x̄		Microbial count		x̄		Microbial count		x̄		Microbial count		x̄
V_{c1}	37		36	V_{c1}				V_{c1}	43		40	V_{c1}			
V_{c2}	35			V_{c2}				V_{c2}	37			V_{c2}			
30 ≤ x̄ of N_{v0} ≤ 160			**Yes**	x̄ of A(15') is ≥ 0,5 x x̄ of N_{v0}?				x̄ of A(5') is ≥ 0,5 x x̄ of N_{v0}?			**Yes**	x̄ of A(') is ≥ 0,5 x x̄ of N_{v0}?			
Control of neutralizer (**B**)				Validation (**C**) of method at highest product concentration: 80 %											
				n.t.				5 minutes				n.t.			
	Microbial count		x̄		Microbial count		x̄		Microbial count		x̄		Microbial count		x̄
V_{c1}	32		37	V_{c1}				V_{c1}	68		58,5	V_{c1}			
V_{c2}	42			V_{c2}				V_{c2}	49			V_{c2}			
x̄ of B is ≥ 0,5 x x̄ of N_{v0}?			**Yes**	x̄ of C(15') is ≥ 0,5 x x̄ of N_{v0}?				x̄ of C(5') is ≥ 0,5 x x̄ of N_{v0}?			**Yes**	x̄ of C(') is ≥ 0,5 x x̄ of N_{v0}?			

Test suspenion (N and N_0)	N	Microbial count of plates				V_{c1}	V_{c2}	$\bar{x}_{wm}$ / lg N	N_0=N/10; lg N_0	6,17 ≤ N0 ≤ 6,70 ?
	1,00E-05	>330		>330		>330	>330	1,95E+07	6,29	**Yes**
	1,00E-06	22		17		22	17	7,29		

Product concentration [%]	Exposure time [min]	Microbial count of plates				V_{c1}	V_{c2}	N_a = x̄ x 10	lg N_a	lg R (lg N_0 =6,29)
10	5	>330		>330		>330	>330	>3300	>3,52	≤ 2,77
50	5	6		8		<14	<14	<140	<2,15	≥ 4,14
80	5	2		3		<14	<14	<140	<2,15	≥ 4,14

4 List of Abbreviations

A	=	control of test conditions
B	=	control of neutraliser
C	=	validation of method at highest product concentration
N	=	test suspension
N_{V0}	=	suspension for validation
n.t.	=	not tested
N_0	=	microbial count of test suspension N / 10 (microbial count at time index 0)
R	=	germ reduction in $\log_{10}$-steps
V_C	=	viable microbial count per ml
$\bar{x}$	=	weighted mean of N