



Public Health Institute Ostrava
Center of clinical laboratories
Testing laboratory n. 1554 accredited
according to ISO/IEC 17025
Partyzánské nám.7, 702 00 Ostrava
VAT: CZ71009396
Laboratory for testing virucidal effect



L 1554

TEST REPORT n. 8/2015/SVU

Virucidal quantitative suspension test for chemical disinfectants and antiseptics used in human medicine - Test method and requirements (phase 2/ step 1) – according DVV/RKI:2008

Customer:

SCHULKE CZ s.r.o.
Lidická 326
735 95 Bohumín
CZ

Order number:

not specified

Reference number:

ZU/12019/2016

Identification of disinfectant – sample:

Product name:

DESAM EFFEKT+

Lot number:

017A160120

Expiration:

not specified

Producer:

Schulke CZ

Storage conditions:

not specified

Diluent product recommended by the producer for use:

domestic water

Product appearance:

clear liquid

The active substance(s) and its (their) concentration:

CAS 2372-82-9 7,2%
CAS 7173-51-5 3,0%
CAS 68424-85-1 19,0%
CAS 122-99-6 10,0%

Purpose of product:

surface and instruments disinfection

Date of delivery of the product:

25.4.2016

Date of test:

25.4. - 15.6.2016

Results - for details see annex:

According to DVV/RKI the test product DESAM EFEKT+, lot.n. 017A160120, designed for surface and instruments disinfection, diluted by water to 0,5% reduced virus titre $4,0 \pm 0,000$ lg after an exposure time 10 min, 15 min and 30 min, at temperature $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$, with protein load (10% fetal bovine serum), using viral titration on monolayer cell culture on a microtitre plate by reduction of reference virus *Vaccinia virus, strain Elstree*, i.e. **demonstrate virucidal activity for *Vaccinia virus* by more than 4 lg.**

According to DVV/RKI the test product DESAM EFEKT+, lot.n. 017A160120, designed for surface and instruments disinfection, diluted by water to 0,25% reduced virus titre $4,0 \pm 0,000$ lg after an exposure time 30 min, at temperature $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$, with protein load (10% fetal bovine serum), using viral titration on monolayer cell culture on a microtitre plate by reduction of reference virus *Vaccinia virus, strain Elstree*, i.e. **demonstrate virucidal activity for *Vaccinia virus* by more than 4 lg.**

According to DVV/RKI the test product DESAM EFEKT+, lot.n. 017A160120, designed for surface and instruments disinfection, diluted by water to 0,5% reduced virus titre $4,0 \pm 0,000$ lg after an exposure time 10 min, 15 min and 30 min, at temperature $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$, with protein load (10% fetal bovine serum), using viral titration on monolayer cell culture on a microtitre plate by reduction of reference virus *Bovine viral diarrhea virus, strain NADL*, i.e. **demonstrate virucidal activity for *BVDV* by more than 4 lg.**

According to DVV/RKI the test product DESAM EFEKT+, lot.n. 017A160120, designed for surface and instruments disinfection, diluted by water to 0,25% reduced virus titre $4,0 \pm 0,000$ lg after an exposure time 30 min, at temperature $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$, with protein load (10% fetal bovine serum), using viral titration on monolayer cell culture on a microtitre plate by reduction of reference virus *Bovine viral diarrhea virus, strain NADL*, i.e. **demonstrate virucidal activity for *BVDV* by more than 4 lg.**

Conclusion and interpretation:

According to DVV/RKI the test product DESAM EFEKT+, lot.n. lot.n. 017A160120 diluted by water to 0,5% demonstrate limited virucidal activity to enveloped viruses under the conditions with protein load after exposure time 10 min.

According to DVV/RKI the test product DESAM EFEKT+, lot.n. lot.n. 017A160120 diluted by water to 0,25% demonstrate limited virucidal activity to enveloped viruses under the conditions with protein load after exposure time 30 min.

In Ostrava, 20.6.2016

Zdravotní ústav se sídlem v Ostravě

Partyzánské nám. 7, 702 00 Ostrava

IC: 71009398



Mgr. Ludmila Porubová

Guarantor of testing

Annex to the protocol n.: 8/2016/SVU

Identification of product:

Product name: DESAM EFFEKT+
Lot number: 017A160120
Expiratin: not specified
Producer: Schulke CZ s.r.o.
Date of delivery of product: 25.4.2016
Storage conditions: not specified
Diluent: domestic water
Product appearance: clear liquid
The active compound(s)
and its (their) concentration: CAS 2372-82-9 7,2%
CAS 7173-51-5 3,0%
CAS 68424-85-1 19,0%
CAS 122-99-6 10,0%

Experimental conditions:

Quantitative suspension test for the determine of virucidal effect of disinfectant according DVV/RKI (SOP n. 1901)
Date of testing: 25.4. - 15.6.2016
Diluent: hard water
Testing concentration: 0,25%; 0,5%
Appearance of dilution of the product: clear solution
Contact times: 0,5% - 10 min, 15 min, 30 min
0,25% - 30 min
Testing temperature: 20°C±1°C
Interfering substance: with protein load – 10% fetal bovine serum (FBS)
Stability of mixture during testing: after mixing precipitate was formed
Incubation temperature: 37°C±1°C
Method of filtration: MicroSpin
Test virus: *Vaccinia virus, strain Elstree* (ATCC) 5.passage, EMEM + 2% FBS
Bovine viral diarrhea virus, strain NADL(ATCC), 4. passage, DMEM + 2% FBS
Proces to stop action of product: virucidal activity of product is suppressed by transferring the sample into the ice cold diluent
Cell line: Vero (ATCC), 30. to 36.passagež, 6.passage, DMEM + 10% FBS
KOP-R (FLI), 49. to 53. passage, 27.passage, EMEM + 10% FBS
Titration method: viral titration on monolayer cell culture on the microplates
Reference substance: Formaldehyde (Sigma-Aldrich, č.š. SZBC2290V)
Titers callculated by: Spaerman – Kärber's method

Test detail:

1. Preparation of tissue culture testing
2. Preparation of the test virus suspension
3. Test infectivity of the virus
4. Titration of the virus with the conditions
5. The cytotoxic effect of the product
6. Reference viral inactivation test
7. Viral inactivacion test of product
8. Control of susceptibility

Table n.1 The results and validation of the test for product DESAM EFEKT+ to Vaccinia virus, strain Elstree – 1.test

Product	Concentration	Interfering substance	Level of cytotoxicity	log 10 TCID ₅₀ / ml after ... min					Reduction factor (Δlog ₁₀ TCID ₅₀ / ml after ... min)				
				5	10	15	30	60	5	10	15	30	60
DESAM EFEKT+	0,5%	10% FBS	4,5	n.d.	≥4,5 ± 0,000	≥4,5 ± 0,000	≥4,5 ± 0,000	n.d.	n.d.	3,0 ± 0,000	3,0 ± 0,000	3,0 ± 0,000	n.d.
DESAM EFEKT++ Microspin	0,5%	10% FBS	3,5	n.d.	≥3,5 ± 0,000	≥3,5 ± 0,000	≥3,5 ± 0,000	n.d.	n.d.	4,0 ± 0,000	4,0 ± 0,000	4,0 ± 0,000	n.d.
DESAM EFEKT+	0,25%	10% FBS	4,5	n.d.	n.d.	n.d.	≥4,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	3,0 ± 0,000	n.d.
DESAM EFEKT++ Microspin	0,25%	10% FBS	3,5	n.d.	n.d.	n.d.	≥3,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	4,0 ± 0,000	n.d.
Formaldehyde + Microspin	0,7% (m/V)	PBS	3,5	4,3 ± 0,151	n.d.	4,1 ± 0,239	≥3,5 ± 0,000	≥3,5 ± 0,000	3,2 ± 0,302	n.d.	3,4 ± 0,114	4,0 ± 0,000	4,0 ± 0,000
Virus control	n.a.	10% FBS	n.a.	7,5 ± 0,000	n.d.	n.d.	n.d.	n.d.					
Virus control + Microspin	n.a.	10% FBS	n.a.	7,5 ± 0,000	n.d.	n.d.	n.d.	7,5 ± 0,000					
Susceptibility of cells - PBS	n.a.	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	7,5 ± 0,000					
Susceptibility of cells – DESAM EFEKT+	0,00025%	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	7,1 ± 0,185					

Prepared by: Mgr. Ludmila Porubová



Table n.2 The results and validation of the test for product DESAM EFEKT+ to Vaccinia virus, strain Elstree – 2. test

Product	Concentration	Interfering substance	Level of cytotoxicity	log 10 TCID ₅₀ / ml after ... min					Reduction factor (Δlog ₁₀ TCID ₅₀ / ml after ... min)				
				5	10	15	30	60	5	10	15	30	60
DESAM EFEKT+	0,5%	10% FBS	4,5	n.d.	≥4,5 ± 0,000	≥4,5 ± 0,000	≥4,5 ± 0,000	n.d.	n.d.	3,0 ± 0,000	3,0 ± 0,000	3,0 ± 0,000	n.d.
DESAM EFEKT++ Microspirin	0,5%	10% FBS	3,5	n.d.	≥3,5 ± 0,000	≥3,5 ± 0,000	≥3,5 ± 0,000	n.d.	n.d.	4,0 ± 0,000	4,0 ± 0,000	4,0 ± 0,000	n.d.
DESAM EFEKT+	0,25%	10% FBS	4,5	n.d.	n.d.	n.d.	≥4,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	3,0 ± 0,000	n.d.
DESAM EFEKT++ Microspirin	0,25%	10% FBS	3,5	n.d.	n.d.	n.d.	≥3,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	4,0 ± 0,000	n.d.
Formaldehyde + Microspirin	0,7% (m/V)	PBS	3,5	4,5 ± 0,000	n.d.	4,1 ± 0,185	≥3,5 ± 0,000	≥3,5 ± 0,000	3,0 ± 0,000	n.d.	3,4 ± 0,069	4,0 ± 0,000	4,0 ± 0,000
Virus control	n.a.	10% FBS	n.a.	7,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Virus control + Microspirin	n.a.	10% FBS	n.a.	7,5 ± 0,000	n.d.	n.d.	n.d.	7,5 ± 0,000	n.d.	n.d.	n.d.	n.d.	n.d.
Susceptibility of cells - PBS	n.a.	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	7,3 ± 0,151	n.d.	n.d.	n.d.	n.d.	n.d.
Susceptibility of cells – DESAM EFEKT+	0,00025%	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	7,3 ± 0,151	n.d.	n.d.	n.d.	n.d.	n.d.

Prepared by: Mgr. Ludmila Porubová

Table n.3 The results and validation of the test for product DESAM EFJEKT+ to BVDV, strain NADL - 1.test

Product	Concentration	Interfering substance	Level of cytotoxicity	log 10 TCID ₅₀ / ml after ... min					Reduction factor ($\Delta \log_{10}$ TCID ₅₀ / ml after ... min)				
				5	10	15	30	60	5	10	15	30	60
DESAM EFJEKT+	0,5%	10% FBS	3,5	n.d.	$\geq 3,5 \pm 0,000$	$\geq 3,5 \pm 0,000$	$\geq 3,5 \pm 0,000$	n.d.	n.d.	$3,0 \pm 0,000$	$3,0 \pm 0,000$	$3,0 \pm 0,000$	n.d.
DESAM EFJEKT++ Microspin	0,5%	10% FBS	2,5	n.d.	$\geq 2,5 \pm 0,000$	$\geq 2,5 \pm 0,000$	$\geq 2,5 \pm 0,000$	n.d.	n.d.	$4,0 \pm 0,000$	$4,0 \pm 0,000$	$4,0 \pm 0,000$	n.d.
DESAM EFJEKT+	0,25%	10% FBS	3,5	n.d.	n.d.	n.d.	$\geq 3,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.	$3,0 \pm 0,000$	n.d.
DESAM EFJEKT++ Microspin	0,25%	10% FBS	2,5	n.d.	n.d.	n.d.	$\geq 2,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.	$4,0 \pm 0,000$	n.d.
Formaldehyde + Microspin	0,7% (m/V)	PBS	3,5	$3,9 \pm 0,185$	n.d.	$3,7 \pm 0,151$	$\geq 3,5 \pm 0,000$	$\geq 3,5 \pm 0,000$	$2,6 \pm 0,370$	n.d.	$2,8 \pm 0,046$	$3,0 \pm 0,000$	$3,0 \pm 0,000$
Virus control	n.a.	10% FBS	n.a.	$6,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.					
Virus control + Microspin	n.a.	10% FBS	n.a.	$6,5 \pm 0,000$	n.d.	n.d.	n.d.	$6,5 \pm 0,000$					
Susceptibility of cells - PBS	n.a.	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	$6,5 \pm 0,000$					
Susceptibility of cells - DESAM EFJEKT+	0,00025%	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	$6,5 \pm 0,000$					

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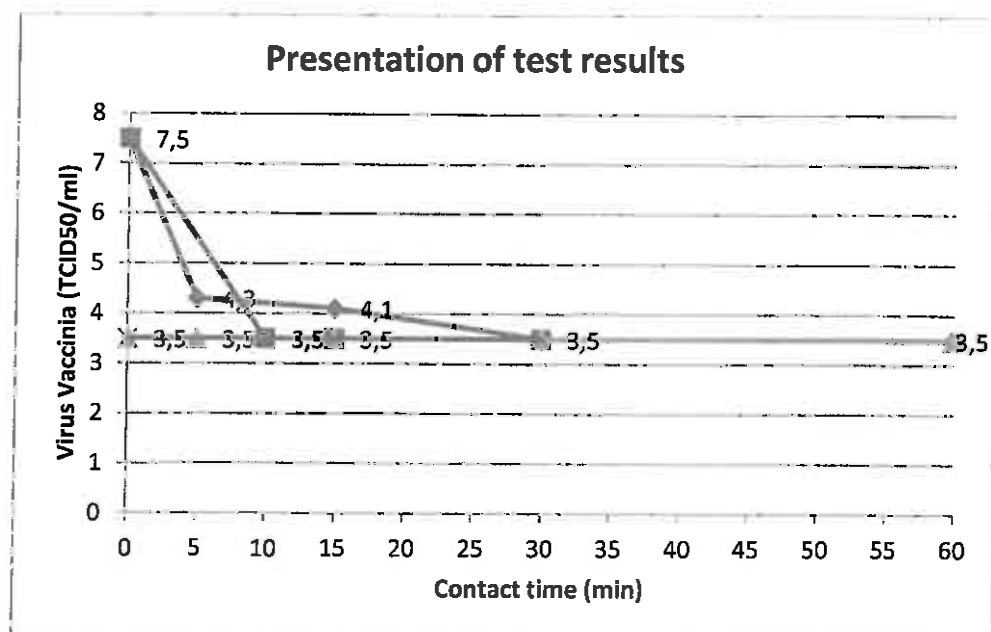
Table n.4 The results and validation of the test for product DESAM EFEKT+ to BVDV, strain NADL – 2.test

Product	Concentration	Interfering substance	Level of cytotoxicity	log 10 TCID ₅₀ / ml after ... min					Reduction factor ($\Delta \log_{10}$ TCID ₅₀ / ml after ... min)				
				5	10	15	30	60	5	10	15	30	60
DESAM EFEKT+	0,5%	10% FBS	3,5	n.d.	$23,5 \pm 0,000$	$23,5 \pm 0,000$	$23,5 \pm 0,000$	n.d.	n.d.	$3,0 \pm 0,000$	$3,0 \pm 0,000$	$3,0 \pm 0,000$	n.d.
DESAM EFEKT++ Microspin	0,5%	10% FBS	2,5	n.d.	$22,5 \pm 0,000$	$22,5 \pm 0,000$	$22,5 \pm 0,000$	n.d.	n.d.	$4,0 \pm 0,000$	$4,0 \pm 0,000$	$4,0 \pm 0,000$	n.d.
DESAM EFEKT+	0,25%	10% FBS	3,5	n.d.	n.d.	n.d.	$23,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.	$3,0 \pm 0,000$	n.d.
DESAM EFEKT++ Microspin	0,25%	10% FBS	2,5	n.d.	n.d.	n.d.	$22,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.	$4,0 \pm 0,000$	n.d.
Formaldehyde + Microspin	0,7% (m/V)	PBS	3,5	$3,9 \pm 0,185$	n.d.	$3,5 \pm 0,151$	$23,5 \pm 0,000$	$23,5 \pm 0,000$	$2,6 \pm 0,370$	n.d.	$3,0 \pm 0,046$	$3,0 \pm 0,000$	$3,0 \pm 0,000$
Virus control	n.a.	10% FBS	n.a.	$6,5 \pm 0,000$	n.d.	n.d.	n.d.	n.d.					
Virus control + Microspin	n.a.	10% FBS	n.a.	$6,5 \pm 0,000$	n.d.	n.d.	n.d.	$6,5 \pm 0,000$					
Susceptibility of cells - PBS	n.a.	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	$6,3 \pm 0,151$					
Susceptibility of cells – DESAM EFEKT+	0,00025%	10% FBS	n.a.	n.d.	n.d.	n.d.	n.d.	$6,1 \pm 0,185$					

Prepared by: Mgr. Ludmila Porubová

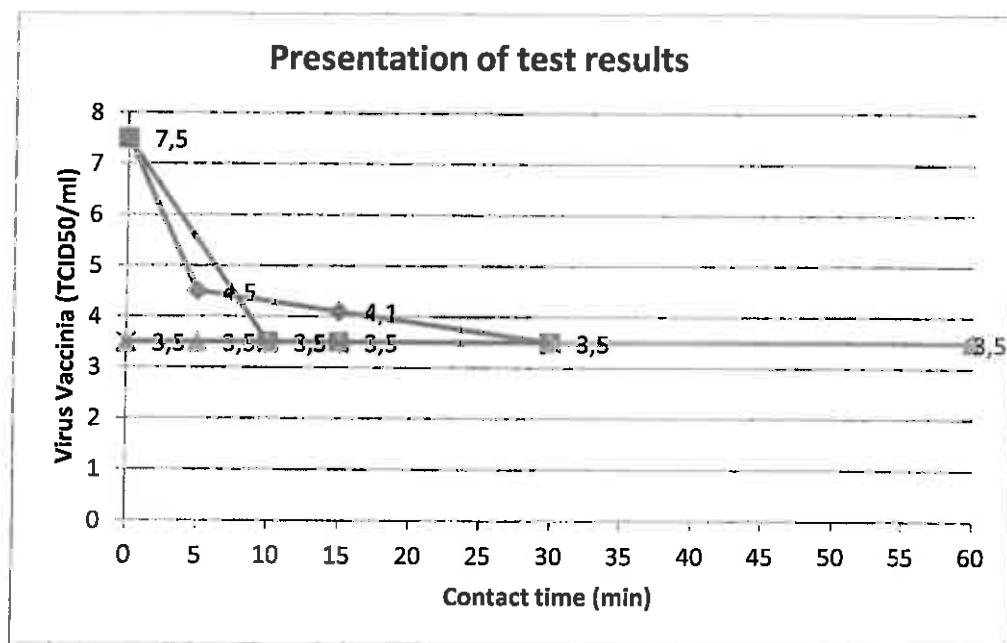
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Figure 1: Graphic presentation of results of the test for product DESAM EFJEKT+ to *Vaccinia virus*, strain *Elstree*,– 1.test



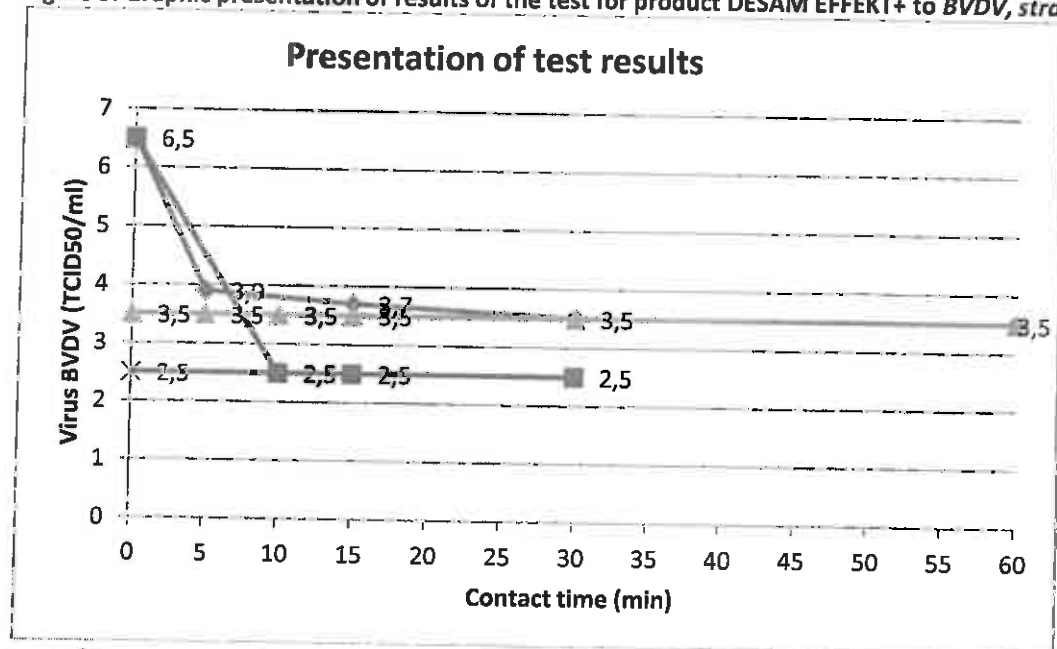
Key: —●— Inactivation of virus BVDV by formaldehyde 0,7%, —■— Inactivation of virus BVDV by Desam efekt+ 0,5%,
—▲— Cytotoxicity of formadlehyde 0,7%, —◆— Cytotoxicity of Desam efekt+ 0,5%

Figure 2: Graphic presentation of results of the test for product DESAM EFJEKT+ to *Vaccinia virus*, strain *Elstree* – 2.test



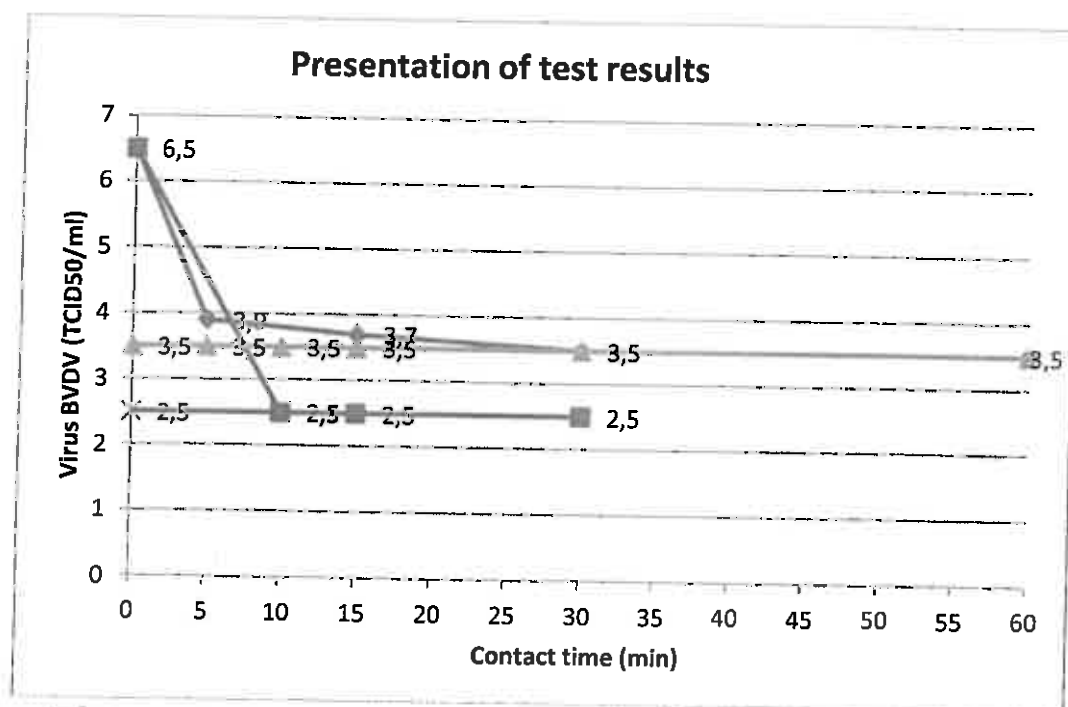
Key: —●— Inactivation of virus BVDV by formaldehyde 0,7%, —■— Inactivation of virus BVDV by Desam efekt+ 0,5%,
—▲— Cytotoxicity of formadlehyde 0,7%, —◆— Cytotoxicity of Desam efekt+ 0,5%

Figure 3: Graphic presentation of results of the test for product DESAM EFFEKT+ to BVDV, strain NADL – 1.test



Key: ◆ Inactivation of virus Vaccinia by formaldehyde 0,7%, ■ Inactivation of virus Vaccinia by Desam effekt+ 0,5%, ▲ Cytotoxicity of formaldehyde 0,7%, ✕ Cytotoxicity of Desam effekt+ 0,5%

Figure 4: Graphic presentation of results of the test for product DESAM EFFEKT+ to BVDV, strain NADL – 2.test



Key: ◆ Inactivation of virus Vaccinia by formaldehyde 0,7%, ■ Inactivation of virus Vaccinia by Desam effekt+ 0,5%, ▲ Cytotoxicity of formaldehyde 0,7%, ✕ Cytotoxicity of Desam effekt+ 0,5%

Table n.5: Raw data of test for product DESAM EFEKT+ to *Vaccinia virus*, strain *Elstree* – 1.test

Product	Concentration	Interfering substance	Contact time	Dilution (log 10)							
				-1	-2	-3	-4	-5	-6	-7	-8
Desam efekt+	0,5%	10% FBS	10 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	10 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	15 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	15 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	30 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,25%	10% FBS	30 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,25%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Cytotoxicity DESAM EFEKT+	0,5%	10% FBS	n.a.	CT	CT	CT	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,5%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+	0,25%	10% FBS	n.a.	CT	CT	CT	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,25%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicita Formaldehyd + MicroSpin	0,7% (m/V)	PBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Formaldehyde + Microspin	0,7% (m/V)	PBS	5 min	CT	CT	03323	00000	00000	00000	00000	00000
			15 min	CT	CT	02030	00000	00000	00000	00000	00000
			30 min	CT	CT	00000	00000	00000	00000	00000	00000
			60 min	CT	CT	00000	00000	00000	00000	00000	00000
Susceptibility of cells - PBS	n.a.	10% FBS	60 min	44444	44444	44444	44444	44444	32332	00000	00000
Susceptibility of cells - DESAM EFEKT+	0,00005%	10% FBS	60 min	44444	44444	44444	44444	44444	33200	00000	00000
Virus control	n.a.	10% FBS	10 min	44444	44444	44444	44444	44444	33323	00000	00000
Virus control + Microspin	n.a.	10% FBS	10 min	44444	44444	44444	44444	44444	23322	00000	00000
Virus control + Microspin	n.a.	10% FBS	60 min	44444	44444	44444	44444	44444	32313	00000	00000

1 to 4 virus detectable (1 = 25% CPE, 4 = 100% CPE)

0 no virus/ no cytotoxicity

n.a. not applicable

n.d. not done

CT Cytotoxicologic effect

CPE Cytopathogenic effect

Prepared by: Mgr. Ludmila Porubová



This protocol cannot be reproduced in whole or in part without the express written permission of testing laboratory. Results are related only to tested sample. The center of clinical laboratories - testing laboratory n.1554 accredited according to ISO/ IEC :7025. List of accredited methods is shown in www.zuova.cz. The sample was examined by SOP No.1901

Table n.6: Raw data of test for product DESAM EFEKT+ to *Vaccinia virus*, strain *Elstree* – 2.test

Product	Concentration	Interfering substance	Contact time	Dilution (log 10)							
				-1	-2	-3	-4	-5	-6	-7	-8
Desam efekt+	0,5%	10% FBS	10 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	10 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	15 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	15 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	30 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+	0,25%	10% FBS	30 min	CT	CT	CT	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,25%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Cytotoxicity DESAM EFEKT+	0,5%	10% FBS	n.a.	CT	CT	CT	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,5%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+	0,25%	10% FBS	n.a.	CT	CT	CT	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,25%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity Formaldehyd + MicroSpin	0,7% (m/V)	PBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Formaldehyde + Microspin	0,7% (m/V)	PBS	5 min	CT	CT	23223	00000	00000	00000	00000	00000
			15 min	CT	CT	33200	00000	00000	00000	00000	00000
			30 min	CT	CT	00000	00000	00000	00000	00000	00000
			60 min	CT	CT	00000	00000	00000	00000	00000	00000
Susceptibility of cells - PBS	n.a.	10% FBS	60 min	44444	44444	44444	44444	44444	33320	00000	00000
Susceptibility of cells - DESAM EFEKT+	0,00005%	10% FBS	60 min	44444	44444	44444	44444	44444	22220	00000	00000
Virus control	n.a.	10% FBS	10 min	44444	44444	44444	44444	44444	23222	00000	00000
Virus control + Microspin	n.a.	10% FBS	10 min	44444	44444	44444	44444	44444	33333	00000	00000
Virus control + Microspin	n.a.	10% FBS	60 min	44444	44444	44444	44444	44444	33333	00000	00000

1 to 4 virus detectable (1 = 25% CPE, 4 = 100% CPE)

0 no virus/ no cytotoxicity

n.a. not applicable

n.d. not done

CT Cytotoxicologic effect

CPE Cytopathogenic effect

Prepared by: Mgr. Ludmila Porubová



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Table n.7: Raw data of test for product DESAM EFEKT+ to BVDV, strain NADL- 1.test

Product	Concentration	Interfering substance	Contact time	Dilution (log 10)							
				-1	-2	-3	-4	-5	-6	-7	-8
Desam effekt+	0,5%	10% FBS	10 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam effekt+ + MicroSpin	0,5%	10% FBS	10 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam effekt+	0,5%	10% FBS	15 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam effekt+ + MicroSpin	0,5%	10% FBS	15 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam effekt+	0,5%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam effekt+ + MicroSpin	0,5%	10% FBS	30 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam effekt+	0,25%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam effekt+ + MicroSpin	0,25%	10% FBS	30 min	CT	00000	00000	00000	00000	00000	00000	00000
Cytotoxicity DESAM EFEKT+	0,5%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,5%	10% FBS	n.a.	CT	00000	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+	0,25%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,25%	10% FBS	n.a.	CT	00000	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity Formaldehyd + MicroSpin	0,7% (m/V)	PBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Formaldehyde + Microspin	0,7% (m/V)	PBS	5 min	CT	CT	02200	00000	00000	00000	00000	00000
			15 min	CT	CT	20000	00000	00000	00000	00000	00000
			30 min	CT	CT	00000	00000	00000	00000	00000	00000
			60 min	CT	CT	00000	00000	00000	00000	00000	00000
Susceptibility of cells - PBS	n.a.	10% FBS	60 min	44444	44444	44444	44444	43334	00000	00000	00000
Susceptibility of cells - DESAM EFEKT+	0,00005%	10% FBS	60 min	44444	44444	44444	44444	44444	00000	00000	00000
Virus control	n.a.	10% FBS	10 min	44444	44444	44444	44444	33334	00000	00000	00000
Virus control + Microspin	n.a.	10% FBS	10 min	44444	44444	44444	44444	33334	00000	00000	00000
Virus control + Microspin	n.a.	10% FBS	60 min	44444	44444	44444	44444	44433	00000	00000	00000

1 to 4 virus detectable (1 = 25% CPE, 4 = 100% CPE)

0 no virus/ no cytotoxicity

n.a. not applicable

n.d. not done

CT Cytotoxicologic effect

CPE Cytopathogenic effect

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Table n.8: Raw data of test for product DESAM EFEKT+ to BVDV, strain NADL – 2.test

Product	Concentration	Interfering substance	Contact time	Dilution (log 10)							
				-1	-2	-3	-4	-5	-6	-7	-8
Desam efekt+	0,5%	10% FBS	10 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	10 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	15 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	15 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam efekt+	0,5%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,5%	10% FBS	30 min	CT	00000	00000	00000	00000	00000	00000	00000
Desam efekt+	0,25%	10% FBS	30 min	CT	CT	00000	00000	00000	00000	00000	00000
Desam efekt+ + MicroSpin	0,25%	10% FBS	30 min	CT	00000	00000	00000	00000	00000	00000	00000
Cytotoxicity DESAM EFEKT+	0,5%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,5%	10% FBS	n.a.	CT	00000	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+	0,25%	10% FBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicity DESAM EFEKT+ + Microspin	0,25%	10% FBS	n.a.	CT	00000	00000	00000	n.a.	n.a.	n.a.	n.a.
Cytotoxicita Formaldehyd + MicroSpin	0,7% (m/V)	PBS	n.a.	CT	CT	00000	00000	n.a.	n.a.	n.a.	n.a.
Formaldehyde + Microspin	0,7% (m/V)	PBS	5 min	CT	CT	03200	00000	00000	00000	00000	00000
			15 min	CT	CT	00000	00000	00000	00000	00000	00000
			30 min	CT	CT	00000	00000	00000	00000	00000	00000
			60 min	CT	CT	00000	00000	00000	00000	00000	00000
Susceptibility of cells - PBS	n.a.	10% FBS	60 min	44444	44444	44444	44444	44403	00000	00000	00000
Susceptibility of cells - DESAM EFEKT+	0,00005%	10% FBS	60 min	44444	44444	44444	44444	33040	00000	00000	00000
Virus control	n.a.	10% FBS	10 min	44444	44444	44444	44444	33334	00000	00000	00000
Virus control + Microspin	n.a.	10% FBS	10 min	44444	44444	44444	44444	33334	00000	00000	00000
Virus control + Microspin	n.a.	10% FBS	60 min	44444	44444	44444	44444	44433	00000	00000	00000

1 to 4 virus detectable (1 = 25% CPE, 4 = 100% CPE)

0 no virus/ no cytotoxicity

n.a. not applicable

n.d. not done

CT Cytotoxicologic effect

CPE Cytopathogenic effect

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