

Test Report : EN 14476; Standard Test Method for Efficacy of Antimicrobial Agents Against Viruses in Suspension modified for Feline Calicivirus (Human Norovirus surrogate)

Test Laboratory

BluTest Laboratories Ltd

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Identification of sample

Name of the product
Project Code
Manufacturer
Date of Delivery
Storage Conditions
Active substances

DUOMAX DR 1
BT-DUO-04
DUO TECH LTD, 11-12 QUEENS SQUARE, BRISTOL, BS1 4NT
7 January 2010
Room temperature
Unknown

Test Method and its validation

Method
Neutralizer

Dilution-neutralization
Dulbecco's modified Eagles medium + 5% V/V Foetal bovine serum

Experimental Conditions

Period of analysis
Product diluent used
Product test concentrations
Appearance product dilutions
Contact time
Test temperature
Interfering substance
Stability of mixture
Temperature of incubation
Identification of virus

12 - 15 January 2010
Sterile, hard water
4.0% V/V, 2.5% V/V and 1.0% V/V
Clear product solution
 $t = 5 \text{ min} \pm 10 \text{ s}$
 $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$
0.6 g/l foetal bovine serum
Precipitate absent throughout the test
 $37^{\circ}\text{C} \pm 1^{\circ}\text{C}$
Feline calicivirus/CRFK cells (Human norovirus surrogate)

Conclusion

According to EN 14476, **DUOMAX DR 1** when diluted at 1.0% (V/V) in hard water, possess virucidal activity in 5 minutes at 20°C under CLEAN conditions (0.6 g/L protein as foetal bovine serum) for feline calicivirus (human norovirus surrogate).

Signed



Dr Chris Woodall
Director, BluTest Laboratories Ltd
Glasgow, UK, January 2010

Suspension test results for the efficacy of DUOMAX DR 1 from DUOTECH LTD against Feline Calicivirus

Exposure time	Virus recovery		Virus recovery		Cytotoxicity		Disinfectant		Disinfectant		Disinfectant	
	0 min	(TCID ₅₀ /ml)	raw data	TCID ₅₀	raw data	TCID ₅₀	raw data	TCID ₅₀	raw data	TCID ₅₀	raw data	TCID ₅₀
5 min	6.67	1.48E+08	7.00	3.16E+08	4.00	3.16E+05	4.00	3.16E+05	3.00	3.16E+04	3.00	3.16E+04
	1.48E+08		3.16E+08		3.16E+05		3.16E+05		3.16E+04		3.16E+04	
log	8.17		8.50		5.50		5.50		4.50		4.50	
log difference							3.00		3.00		4.00	

Stock Virus (TCID₅₀) 8.00 3.16E+09

Suspension test results for the efficacy of DUOMAX DR 1 from DUOTECH LTD against Feline Calicivirus

Product	Interfering substance	Concentration	Level of cytotoxicity	lg TCID50		>4 lg reduction after ... min
				0 min	5 min	
DUOMAX DR1	0.3g/l BSA	4.0% (v/v)	5.50	8.17	5.50	5 ^a
		2.5% (v/v)	5.50	8.17	4.50	<5
		1.0% (v/v)	5.50	8.17	4.50	<5
Virus Control		n.a.	n.a.	8.17	8.50	n.a.

a: >4 lg reduction inferred from results at lower dilutions

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