EUROLAB Laboratory Services

TEST / INSPECTION REPORT

EUROLAB LABORATORY SERVICES

TÜRCERT TEKNİK KONTROL VE BELGELENDİRME A.Ş.

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Sample ID :	**Nasiol ABC 38**

	TEST	METHOD	RESULT
*	**ISO 18184 : Textiles — Determination of antiviral activity of textile products**	**ISO 18184:2019**	**PASS**

***The sample was tested 8 days after plating.**

Seal

Customer Representative
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Environment

The requirements and standards apply to equipment intended for use in

X	Residential (domestic) environment
X	Commercial and light-industrial environment
X	Industrial environment
X	Medical environment

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ISO 18184 : Textiles — Determination Of Antiviral Activity Of Textile Products

Scope

This document specifies testing methods for the determination of the antiviral activity of the textile products against specified viruses. Due to the individual sensitivities, the results of one test virus cannot be transposed to other viruses. The textile products include woven and knitted fabrics, fibres, yarns, braids, etc.

Principle

Inoculate virus solution on a test sample with antiviral finishes and a control sample (cotton standard cloth) to be compared, then make contact between the fabric and virus for a certain time. After contact, the number of viruses on the sample are determined by plaque assay. Calculate the antiviral activity value by comparing the number of viruses between the test sample and the control sample.

Preparation for test virus

The viruses are cryopreserved in the freezer, so the operation to defrost and to grow them for test is required.

Antiviral Chemicals

Inorganic or organic chemicals able to reduce virus activity (3.2)
Note 1 to entry: The organic antiviral chemicals give the change to the surface protein of virus by the chemical adsorption. The inorganic metallic antiviral substances destroy or change the morphology of the virus by the extraction of hydrogen atom in the virus protein by OH radicals which are generated by the radical reaction.

Procedure

All specimens are prepared in the vial containers with caps.
The preparation of specimens in sterile Petri dishes is permitted provided that the moisture is ensured (by placing a cover on each Petri dish) when the Petri dishes are placed in the incubator under the testing conditions.
Then, aseptically transfer the specimens in sterile vials.
Deposit exactly 0,2 ml of the virus suspension prepared onto the specimen at several points of the specimen in the vial containers by micropipette for all. Then put the caps on all vial containers and close them.
Put the vials in the incubator (7.25) and keep for 2 h as a standard time at a temperature of 25 °C.
The contacting time could be varied and may be determined by the concerned party, but not longer than 24 h.

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[Evaluation / Reference value]
Evaluate according to antiviral activity value [Mv].

Formula For Activity Value	Reference Value		Description Of The Effect
Antiviral activity value [Mv] LogVb – LogVc (LogVa – LogVc)* [1]	Good Effect	3 ,0 > Mv ≥ 2 ,0	Has enough effect
	Excellent Effect	[Mv] ≧3.0	

Mv : Antiviral activity value
LogVa : Common logarithm of infectious value immediately after inoculation of control specimen
LogVb : Common logarithm of infectious value after culture of control specimen
LogVc : Common logarithm of infectious value after culture of test specimen

Virus Name	Sample	Contact Time	Log_{10} Virus Titer		Antiviral Actvity Value Mv	Result
Influenza A virus (H1N1)	Control fabric	0 min	7.13 7.10 7.10	7.11 (Va)	2,41	Good Effect
	Control fabric	15 min	7.01 7.02 7.01	7.01 (Vb)		
	Test fabric	15 min	4.70 4.72 4.69	4.70 (Vc)		

Virus Name	Sample	Contact Time	Log_{10} Virus Titer		Antiviral Actvity Value Mv	Result
Influenza A virus (H1N1)	Control fabric	60 min	5.00 4.98 4.99	4.99	3,06	Excellent Effect
	Test fabric	60 min	4.07 4.06 4.02	4.05		

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IMAGES UNDER THE TEST

End of Report

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