
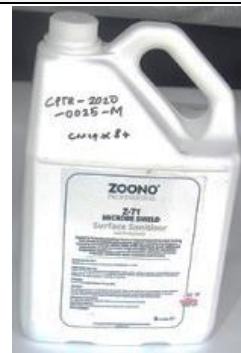
 GOVERNMENT OF DUBAI	Organization unit	إدارة مختبر دبي المركزي Dubai Central Laboratory Department	الوحدة التنظيمية	 بلدية دبي DUBAI MUNICIPALITY
	Document title	Antimicrobial Coating Effectiveness Longevity Test Report	عنوان الوثيقة	
	Document ref.	DM-DCLD-F-CP-2161	رقم الوثيقة	

Request number	CPTR-2020-0025-M	Report number	TR-1539-2020	Test start	25/08/2020
Request date	25/08/2020	Report date	28/09/2020	Test completion	28/09/2020

Customer information			
Name	INTERNATIONAL BUSINESS GENERAL TRADING		
E-mail	shahul.hameed@5asec.ae	Phone No.	058 8670253

Product information			
Name	Z-71 MICROBE SHIELD SURFACE SANITISER AND PROTECTANT		
Manufacturer	Zoono Limited	Bar code	-
Brand	Zoono	Date of manufacture	-
Country of origin	New Zealand	Batch / Lot.	127 18
Quantity	1	Unit	Bottle
Volume	5	Unit	litre



Laboratory information
Chemistry Laboratories Unit, Consumer products and commodities Laboratories Section, Dubai Central Laboratory Department, Dubai Municipality, Al Karama Area, Dubai, U.A.E P.O. Box 67 Dubai, Tel. No.: 00971-4-3027007, Fax: 00971-4-3362696 E-mail: info@dm.gov.ae Website: www.dm.gov.ae

Test Description	Antimicrobial Coating Effectiveness longevity					
Test Method	DM-DCLD-SOP-CP-2030*					
Test Condition	<p>Prior to the test the surface of the provided materials were inoculated with known quantity of both test organisms which were allowed to dry at room temperature, each material were then sprayed with testing product, Zoono Z-71 Microbe Shied Surface Sanitizer and Protectant by the customer, allowed to dry then sprayed again. Once thoroughly dry an enumeration was then performed to determine the level of any viable test organisms remaining on the material surface. The materials are kept under the controlled room at room temperature and the each surface are reinoculate with test organisms at 24 hours, 7 days, 14 days, 21 days and 30 days. After each inoculation an enumeration is performed after 2 hours from inoculation by surface contact plating method to determine the surviving test organisms on the coated material surfaces. A control test also performed in parallel on each of the non-coated material surfaces. The reduction of test bacteria is determined against the growth test bacteria on non-coated control material and the Zoono coated test material surfaces.</p>					
Test microorganisms	Sampling Location	Initial bacterial concentration (CFU/0.1ml)	Duration	Number of bacteria after 24 hr at 35°C		Antimicrobial activity
				Control (CFU/ Plate)	Test (CFU/ Plate)	Reduction Percentage (%)
Staphylococcus aureus ATCC 6538	Steel Surface	768	Initial	742	<1	99.9
		866	24 hours	845	<1	99.9
		793	7 th Day	762	<1	99.9
		876	14 th Day	831	<1	99.9
		834	21 st Day	797	<1	99.9
		884	30 th Day	826	<1	99.9
Escherichia coli ATCC 10536	Steel Surface	696	Initial	652	<1	99.9
		880	24 hours	837	<1	99.9
		796	7 th Day	740	<1	99.9
		776	14 th Day	731	<1	99.9
		844	21 st Day	823	<1	99.9
		864	30 th Day	817	<1	99.9

Test microorganisms	Sampling Location	Initial bacterial concentration (CFU/0.1ml)	Duration	Number of bacteria after 24 hr at 35°C		Antimicrobial activity
				Control (CFU/ Plate)	Test (CFU/ Plate)	Reduction Percentage (%)
Staphylococcus aureus ATCC 6538	Glass Surface	768	Initial	742	<1	99.9
		866	24 hours	814	<1	99.9
		793	7 th Day	754	<1	99.9
		876	14 th Day	834	<1	99.9
		834	21 st Day	794	<1	99.9
		884	30 th Day	833	<1	99.9
Escherichia coli ATCC 10536	Glass Surface	696	Initial	647	<1	99.9
		880	24 hours	829	<1	99.9
		796	7 th Day	754	<1	99.9
		776	14 th Day	737	<1	99.9
		844	21 st Day	808	<1	99.9
		864	30 th Day	821	<1	99.9
Staphylococcus aureus ATCC 6538	Plastic surface	768	Initial	737	<1	99.9
		866	24 hours	822	<1	99.9
		793	7 th Day	742	<1	99.9
		876	14 th Day	826	<1	99.9
		834	21 st Day	788	<1	99.9
		884	30 th Day	744	<1	99.9
Escherichia coli ATCC 10536	Plastic surface	696	Initial	645	<1	99.9
		880	24 hours	832	<1	99.9
		796	7 th Day	725	<1	99.9
		776	14 th Day	732	<1	99.9
		844	21 st Day	810	<1	99.9
		864	30 th Day	818	<1	99.9

Test microorganisms	Sampling Location	Initial bacterial concentration (CFU/0.1ml)	Duration	Number of bacteria after 24 hr at 35°C		Antimicrobial activity
				Control (CFU/ Plate)	Test (CFU/ Plate)	Reduction Percentage (%)
Staphylococcus aureus ATCC 6538	Tile Surface	768	Initial	716	<1	99.9
		866	24 hours	822	<1	99.9
		793	7 th Day	744	<1	99.9
		876	14 th Day	846	<1	99.9
		834	21 st Day	793	<1	99.9
		884	30 th Day	831	<1	99.9
Escherichia coli ATCC 10536	Tile Surface	696	Initial	647	<1	99.9
		880	24 hours	828	<1	99.9
		796	7 th Day	731	<1	99.9
		776	14 th Day	716	<1	99.9
		844	21 st Day	790	<1	99.9
		864	30 th Day	814	<1	99.9
Staphylococcus aureus ATCC 6538	Carpet surface	768	Initial	206	<1	99.9
		866	24 hours	816	<1	99.9
		793	7 th Day	742	<1	99.9
		876	14 th Day	828	<1	99.9
		834	21 st Day	784	<1	99.9
		884	30 th Day	832	<1	99.9
Escherichia coli ATCC 10536	Carpet surface	696	Initial	654	<1	99.9
		880	24 hours	810	<1	99.9
		796	7 th Day	724	<1	99.9
		776	14 th Day	702	<1	99.9
		844	21 st Day	790	<1	99.9
		864	30 th Day	810	<1	99.9

Test microorganisms	Sampling Location	Initial bacterial concentration (CFU/0.1ml)	Duration	Number of bacteria after 24 hr at 35°C		Antimicrobial activity
				Control (CFU/ Plate)	Test (CFU/ Plate)	Reduction Percentage (%)
Staphylococcus aureus ATCC 6538	Wood Surface	768	Initial	708	<1	99.9
		866	24 hours	720	<1	99.9
		793	7 th Day	790	<1	99.9
		876	14 th Day	822	<1	99.9
		834	21 st Day	794	<1	99.9
		884	30 th Day	804	78	90.30
Escherichia coli ATCC 10536	Wood Surface	696	Initial	658	<1	99.9
		880	24 hours	722	<1	99.9
		796	7 th Day	732	<1	99.9
		776	14 th Day	786	<1	99.9
		844	21 st Day	798	<1	99.9
		864	30 th Day	746	74	90.08
Staphylococcus aureus ATCC 6538	Rubber surface	768	Initial	742	<1	99.9
		866	24 hours	814	<1	99.9
		793	7 th Day	764	<1	99.9
		876	14 th Day	819	<1	99.9
		834	21 st Day	787	<1	99.9
		884	30 th Day	833	76	90.88
Escherichia coli ATCC 10536	Rubber surface	696	Initial	652	<1	99.9
		880	24 hours	847	<1	99.9
		796	7 th Day	724	<1	99.9
		776	14 th Day	783	<1	99.9
		844	21 st Day	790	<1	99.9
		864	30 th Day	736	72	90.22

Remarks:

Based on the test conducted it has been observed that there is a complete reduction of test bacteria (99.9%) on all provided material surfaces till 30 days from the initial coating of **Zoono Z-71 Microbe Shied Surface Sanitizer and Protectant** except in Rubber and Wood surface. The rubber and wood surface has some viable growth on 30th day with a reduction of 90% test bacteria.

Note:

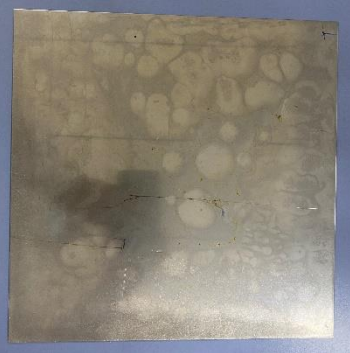

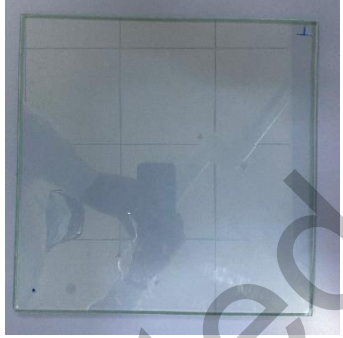



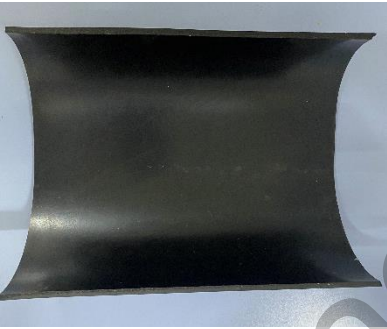


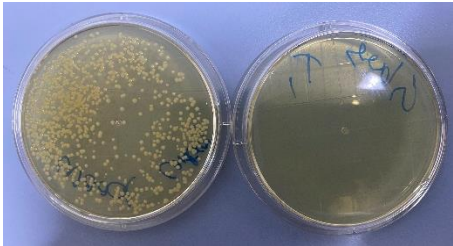
- Abbreviation indications: SN = Serial Number, NA = Not Applicable, NC = Not Conducted, ND = Not Detected, NR= Not Requested, LOR = Limit of Reporting, Uexp % = Expanded Uncertainty Percent, DCLD = Dubai Central Laboratory Department.
- The expanded uncertainty is based on a coverage factor $k=2$, at a confidence level of 95%.
- The results contained herein apply only to the sample submitted and to the specific tests carried out and to the product information provided by the customer.
- (*) Indicates that the test is not accredited by EIAC (Certificate No. 205-LB-TEST).
- For any report that does not have an authentication QR code, do not hesitate to contact cpsreport@dm.gov.ae for clarification.
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Approved by

Engr Abdulrahman Mohammed Abdulla Al Ali

Consumer Products & Commodities Section Manager

Test photos

		
Steel surface	Carpet surface	Glass surface
		
Plastic surface	Wood surface	Tile surface
		
Rubber surface	Control & Test (Wood surface, 30th day)	
		
Control & Test (Rubber surface, 30th day)		Control & Test (no growth)

-END OF REPORT-

The report generated and approved electronically and not required signature or stamp.