

Test Report Report No: QDF17-001635-06 A01 Date: Nov 17 2017

Institute of Marine Biobased Materials of Client name:

Qingdao University

Client address: 308 Ningxia Road, Qingdao, Shandong, P.R.C

Sample name: Alginate Fiber

Sample Batch No. Product Date:

Manufacturer: Qingdao Kangtong Ocean Fiber Co.,LTD

Above information and sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Sample No.: QDF17-001635.001

Date of sample received: Nov 02 2017

Testing period: Nov 02 2017 ~ Nov 16 2017

TEST(S) REQUESTED:

Selected test(s) as requested by applicant

TEST METHOD(S):GB/T 20944.2 Textiles-Evaluation for antibacterial activity-Part 2: Absorption method

TEST ORGANISMS:

Escherichia Coli ATCC 25922, Staphylococcus aureus ATCC 6538, Candida albicans ATCC 10231

COMMENT:

Name of test bacteria (Strain number)	Antibacterial activity value	Percentage of antibacterial activity (%)	Requirement of GB/T20944.2	Comment
Escherichia Coli (ATCC 25922)	3.2	>99	Antibacterial activity value≥1.0(Percentage of antibacterial activity≥90%) the sample with antibacterial activity, Antibacterial activity value≥2.0(Percentage of antibacterial activity≥99%) the sample with good antibacterial activity.	Pass: The submitted sample has good antibacterial activity
Staphylococcus aureus (ATCC 6538)	3.2	>99		Pass: The submitted sample has good antibacterial activity
Candida albicans (ATCC 10231)	3.4	>99		Pass: The submitted sample has good antibacterial activity

This report is to supersede test report No. QDF17-001635-02 Date: Nov 16 2017 original report will be invalid from today.

Chinese shall prevail in this report.

The results shown in this test report refer only to the sample(s) tested, and for clients internal use only. This document cannot be used for publicity, without prior approval of the SGS

SGS Authorized Signature

SGS-CSTC Standards Technical Services Co., Ltd. Qingdao Branch

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TEST RESULT(S):

Name of test bacteria (Strain number)	Escherichia Coli (ATCC 25922)	Staphylococcus aureus (ATCC 6538)	Candida albicans (ATCC 10231)	
Concentration of inoculum (CFU/mL)	2.6x10 ⁵	2.6x10 ⁵	2.5x10 ⁵	
The growth value on the control sample F ($F=lgC_t-lgC_0$)	2.0 $(C_{t:}2.5x10^7 C_{0:}2.6 x10^5)$	2.0 (C _{t:} 2.4x10 ⁷ C _{0:} 2.5x10 ⁵)	2.0 $(C_{t:} 2.4 \times 10^{7} C_{0:} 2.5 \times 10^{5})$	
The number of bacteria obtained from the antimicrobial-treated sample after 24 h incubation (T _t)(CFU)	1.5x10 ⁴	1.6x10 ⁴	9.7x10 ³	
Antibacterial activity value (A)	3.2	3.2	3.4	
Percentage of antibacterial activity (%)	>99	>99	>99	
Sterilization method	Autoclave sterilizer 121°C, 15min			
Incubation time	24h			

Sample description: Sample in bag





*** End of Report***

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