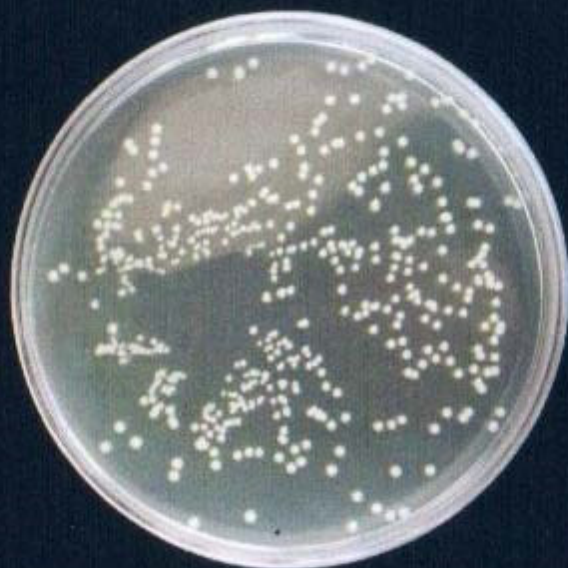


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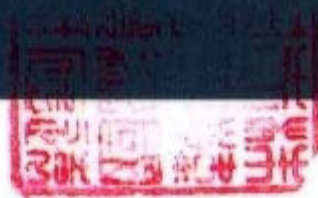
Antibacterial Test
Toothbrush Bristles(Shungite added) (0 h)
(*Escherichia coli* ATCC 25922)



K I F A



Antibacterial Test
Toothbrush Bristles(Shungite added) (24h)
(*Escherichia coli* ATCC 25922)





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KOREA INSTITUTE OF FAR INFRARED APPLIED ESTIMATION

174-12, Seokchon-Dong, Songpa-Gu, Seoul, Korea <http://www.kfir.or.kr> TEL 82-2-2203-6037 FAX 82-2-2203-6061

CERTIFICATE OF TESTING RESULT

Serial No. of Issue : KFIA-139
 Name of Applicant : Kim Eung Wan [De'otech Korea Co., Ltd.]
 Address of Applicant : 139-17, 196, Jiyeong-ro, Ilsandong-gu, Goyang-si, Gyeonggi-do, Korea
 Date of Receipt : 2. 23. 2012
 Name of Test Sample : Toothbrush Bristles(Shungite added)

TEST RESULTS

Test Item	Sample	Early Conc. (CFU/ml)	After 24 hours (CFU/ml)	Reduction Rate Of Bacteria(%)
Antibacterial Test For <i>Escherichia coli</i>	Blank	2.7×10^5	8.4×10^5	—
	Toothbrush Bristles (Shungite added)		$< 1.0 \times 10^3$	99.9
Antibacterial Test For <i>Pseudomonas aeruginosa</i>	Blank	2.5×10^5	7.7×10^5	—
	Toothbrush Bristles (Shungite added)		$< 1.0 \times 10^3$	99.9

Note) 1) The blank test was measured on non-test sample.

2) The bacteria number on the petri dish was detected by multiplication of dilution rate. End.

1) Test method : KFIA-FI-1002

2) Name of used bacteria

Escherichia coli ATCC 25922

Pseudomonas aeruginosa ATCC 15442

3) Refer to the Enclosed (2-1, 2-2)

4) Usage : Quality control

※ This certificate of testing result shall be used within the purpose of its defined usage.

COPY

3 2 2012

month day year

Signed

Choi T. S.

The director of Korea Institute of
Far Infrared Applied Estimation

K I F A

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174-12, Seokchon-Dong, Songpa-Gu, Seoul, Korea <http://www.kfir.or.kr> TEL 82-2-2203-6037 FAX 82-2-2203-6061

CERTIFICATE OF TESTING RESULT

Serial No. of Issue : KFI-204
Name of Applicant : Kim Eung Wan [De' o tech Korea Co., Ltd]
Address of Applicant : 139-17, 196, Jiyeong-ro, Ilsandong-gu, Goyang-si, Gyeonggi-do, Korea
Date of Receipt : 2. 23. 2012
Name of Test Sample : Shungite Bristles

TEST RESULTS

Emissivity (5 ~ 20 μm)	Emission Power (W/m ² · μm , 37°C)
0.896	3.45×10^2

- 1) Test Method : KFIA-FI-1005
- 2) The temperature of 37°C is provided by the applicant.
The above experimental results were measured in comparison with BLACK BODY by using the FT-IR Spectrometer.
- 3) Test Results : Refer to the Enclosed
- 4) Usage : Quality control.

※ This certificate of testing result shall be used within the purpose of its defined usage.

2 27 2012

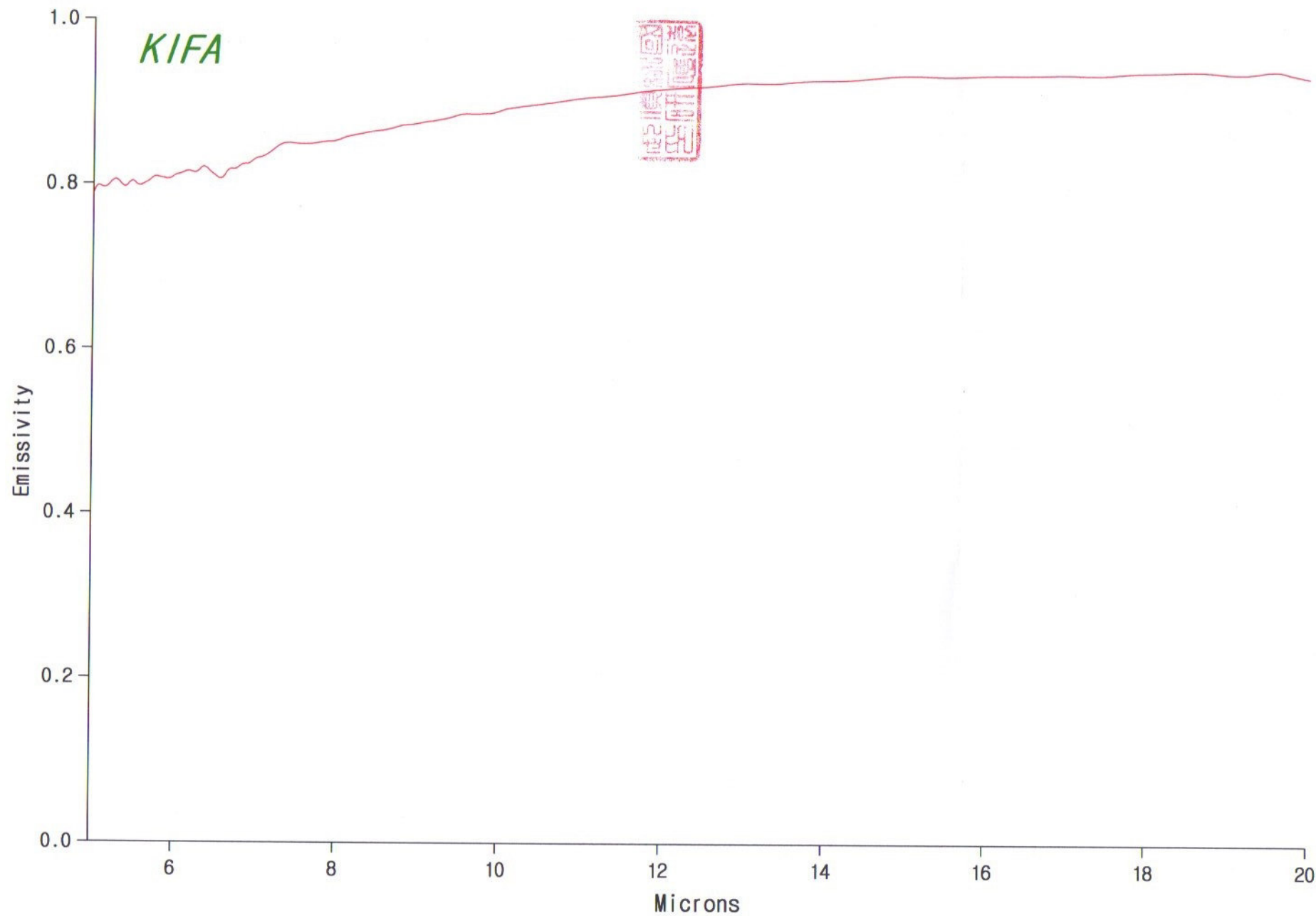
month day year

Signed Choi T. S.

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The director of Korea Institute of
Far Infrared Applied Estimation

Toothbrush Bristles (Shungite added) De`o tech, Korea Co.Ltd.



204
2012. 2. 27.

Toothbrush Bristles (Shungite added) De`o tech, Korea Co.Ltd.

