(28115) 21, Yangcheong-3gil, Ochang-eup, Cheongwon-gu, Chungbuk, Korea
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TEST REPORT

APPLICANT : THERMO BAZALT ENERGY SRL

REPORT NO.	: M271-20-00237
SAMPLE RECEIVED DATE	: 2020-01-07
TEST STARTED DATE	: 2020-01-07
REPORT ISSUED DATE	: 2020-01-20
PAGE	: 1 OF 5

DESCRIPTION : ONE(1) PIECE OF SUBMITTED CUTTING SAID TO BE WOVEN FABRIC.

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ITEM : NANOFIBER FINE DUST NANO FILTER #4

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TEST CONDUCTED : AS REQUESTED BY THE APPLICANT, FOR DETAILS PLEASE SEE ATTACHED PAGES.

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PREPARED AND CHECKED BY
FOR FITI

HONG KWAN, KIM
QUALITY MANAGER

AUTHORIZED BY
FOR FITI

JE-GOO JUN
PRESIDENT

※ Report Verification No.: NRE2-TXPP-AIK2 ※
(You can see the authenticity of your test report through the above "Report Verification No." at FITI homepage.)

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01. MATERIAL (KS K 0210-1 : 2015)

	#1
	POLYESTER

NOTE) EXCLUSIVE OF RESIN

02. FIBER CONTENT (KS K 0210 : 2018)

	#1
POLYESTER	100

NOTE) EXCLUSIVE OF RESIN

03. TENSILE STRENGTH (KS K 0521 : 2017)

	#1
WARP	310
WEFT	290

04. ELONGATION (KS K 0521 : 2017)

	#1
WARP	9.7
WEFT	13.7

05. AIR PERMEABILITY (ASTM D 737-18) : $cm^3/cm^2/s$

	#1
	443

NOTE) TEST AREA : 38 ㎠
APPLIED PRESSURE : 125 Pa

06. LIGHT BLOCKING (KS K 0819 : 2018) : %

	#1
	24.64

NOTE) LIGHT SOURCE OUTPUT USED IN THE APPARATUS : (10 000 ± 100) cd/㎡

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07. TRANSMITTANCE OF VISIBLE RADIATION (CLIENT'S REQUEST METHOD) : %

	#1
	56.9

NOTE) Measuring Instrument : UV-Vis NIR Spectrophotometer
(PerkinElmer_Lambda 1050 with 150 mm InGaAs int. Sphere)
Wavelength Range : 380 nm ~ 780 nm
Wavelength Interval : 10 nm
Measured values at each wavelength were averaged by the client's request.

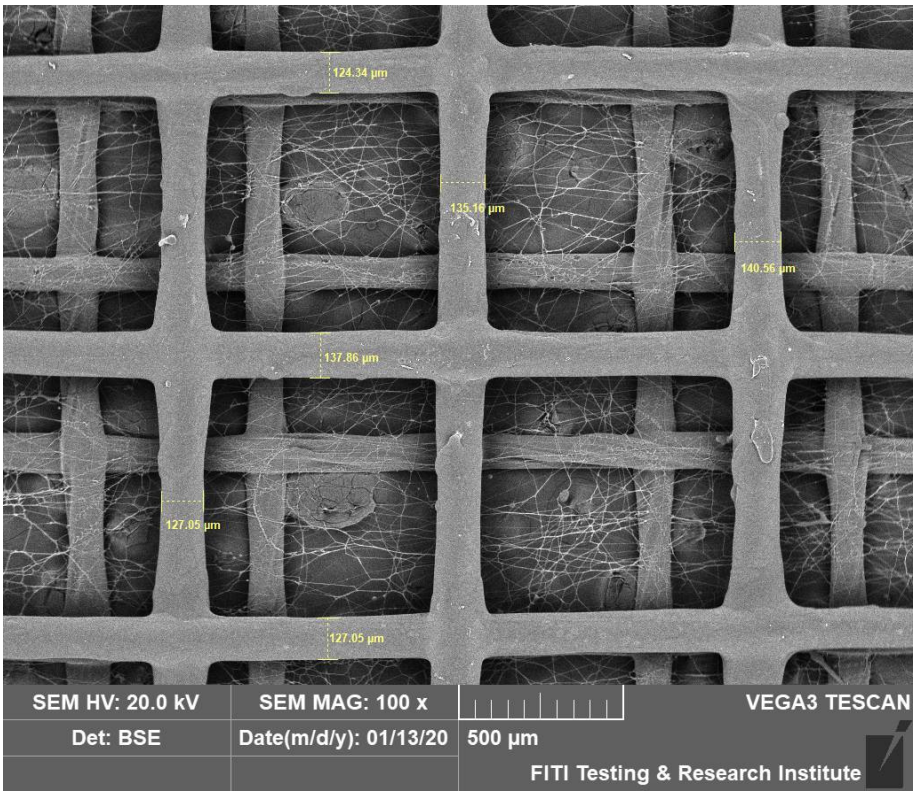
08. EFFICIENCY ARRESTANCE (ASHRAE STANDARD 52.1, SYNTHETIC DUST WEIGHT ARRESTANCE) : %

	#1
	81.3

NOTE) TEST AIR VELOCITY : 1.0 m/s
FINAL RESISTANCE : 76 mmAq
THIS STANDARD TEST METHOD WAS APPLIED BY THE CLIENT'S REQUEST.

09. SEM PHOTOGRAPH (SEM:SCANNING ELECTRONIC MICROSCOPE)

#1
FACE X 100



NOTE) THE TEST WAS CONDUCTED ONLY SURFACE RAW MATERIAL BY THE CLIENT'S REQUEST.

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10. DETERMINATION OF DEODORANT PROPERTY - DETECTOR TUBE METHOD (FITI TEST GUIDELINE FTM-5-2 : 2004) : EFFICIENCY OF DEODORIZATION, %

	#1
FORMALDEHYDE	0.0

NOTE) DIMENSION OF SPECIMEN : 100 cm^2 (10 × 10) cm
GAS BAG SIZE : 5 L
AMOUNT OF GAS PACKED : 3 L
ELAPSED TIME : AFTER 2 h
INITIAL CONCENTRATION : FORMALDEHYDE(15 ppm)
DEODORIZATION EFFICIENCY(%) = ((Cb - Cs)/Cb) x 100
- Cb : BLANK, CONCENTRATION OF THE TEST GAS REMAINED IN THE GAS BAG AFTER 2 h
- Cs : SAMPLE, CONCENTRATION OF THE TEST GAS REMAINED IN THE GAS BAG AFTER 2 h

11. ANTIBACTERIAL ACTIVITY OF TEXTILES (MODIFIED ASTM E 2149-13a) : CFU/mL, BACTERIOSTATIC REDUCTION RATE %

			BLANK	#1
	BACTERIA-1	AT BEGINNING	2.2 x 10^5	2.2 x 10^5
		AFTER 24 h	1.7 x 10^5	6.1 x 10^5
		BACTERIOSTATIC REDUCTION RATE	-	0

NOTE) TEST SPECIMEN WEIGHT : 1.0 g
BUFFER SOLUTION : PHOSPHATE BUFFER 50 mL (pH 7.2)
TEST BACTERIA: BACTERIA-1 - *Staphylococcus aureus* ATCC 6538
SEE ATTACHED PHOTOS

** End of The Report **

SAMPLE :

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- ANTIBACTERIAL ACTIVITY OF PHOTO : BACTERIA-1 : BLANK -

- ANTIBACTERIAL ACTIVITY OF PHOTO : BACTERIA-1 : BLANK -