

Textile Laboratory

Test Report

No: TX33091 /2024 /SP

Date: Apr. 12, 2024

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World Knitting Ind. Co., Ltd.
12F, No. 192, Rui Guang Rd., Nei Hu,
Taipei, Taiwan, R.O.C.

The following samples were submitted and identified by applicant as:

Sample Description	:	Two samples of knitted fabric graphene drop needle polar fleece (A) Test sample (B) Control sample
Color	:	(A) Navy (B) Red
Fiber Content	:	100% Polyester
Fabric Weight	:	155gm/m ²
Style No.	:	D836 Navy with graphene, D837 control sample: Red without graphene
Manufacturer/Vendor	:	World Knitting Ind. Co., Ltd.
Country of Origin	:	Taiwan
Applicant	:	World Knitting Ind. Co., Ltd.
Sample Receiving Date	:	Mar. 29, 2024
Test Performance Period	:	Mar. 29, 2024 to Apr. 12, 2024
Test Performed	:	Selected test(s) as requested by applicant.
Test Results	:	For further details, please refer to the following page(s).

Signed for and on behalf of
SGS Taiwan Ltd.

Cherry Kuo

Kuo Ling, Cherry
Supervisor



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Test Results:

Light-absorbing Thermal Retention Test (BQE A 036-2011)

Test method:

Attach a temperature sensor to the inner-center to the submitted sample. While exposing the sample to the reflex lamp, measure temperature change every one minute in 20 minutes. The measurement conditions are as follows:

1. Lamp: PRF-500WD
2. Irradiation distance: 30 cm
3. Measurement terms: Illuminate the sample with a reflex lamp for 10 minutes, then turn off immediately. Turn the light off, continue measuring the sample for 10 minutes.
4. Test condition: 20±2°C 65±4%RH
5. Measurement method: Sample 1st and 2nd side by side measured under same conditions. Then measure again on alternate sample 1st and 2nd. The average should be test result.

Test Results:

Time (minutes)	Temperature (°C)		Temperature Difference ΔT=(A)-(B)
	(A) Test sample	(B) Control sample	
0	19.9	19.9	0.0
1	46.1	31.1	15.0
2	55.3	35.1	20.2
3	59.0	37.4	21.6
4	60.7	38.6	22.1
5	62.1	39.6	22.5
6	63.0	40.4	22.6
7	64.1	40.7	23.4
8	64.6	41.0	23.6
9	64.8	41.3	23.5
10	65.0	41.4	23.6
11	41.0	30.2	10.8
12	32.3	26.5	5.8
13	28.6	24.6	4.0
14	26.1	23.4	2.7
15	24.6	22.7	1.9
16	23.8	22.3	1.5
17	23.1	21.8	1.3
18	22.6	21.5	1.1
19	22.1	21.2	0.9
20	21.8	21.1	0.7

Tested by other laboratory.

*** End of Report ***

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