

# TEST REPORT



**KOTITI No.** | 82201001130960

**To** | ALL IN GRAPHENE

**Date In** | NOV 23, 2020

**Date Out** | NOV 30, 2020

<b>Title</b>	Test Report
<b>Item</b>	SAMPLE
<b>Item Name</b>	BE WITH GRAPHNENE
<b>Buyer</b>	N/S
<b>Brand Name</b>	N/S
<b>Style Number</b>	N/S
<b>PO Number</b>	N/S
<b>Related(FO, FP) Report No</b>	N/S
<b>Color</b>	N/S
<b>Submitted Fiber Composition</b>	N/S
<b>Recommended Fiber Composition</b>	N/A
<b>Submitted Care Instruction</b>	N/S
<b>Recommended Care Instruction</b>	N/A
<b>Test Result</b>	For further details, please refer to the following page(s).

Affirmation	Prepared by Name : Min Gyu Kim		Technical Manager Name : Jae Yoon Han	
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**KOTITI** Testing & Research Institute



**Contact Information for technical questions and general inquiries.**

Primary Contact : Hong Seihee T (822)3451-7064 E hongsh@kr.kotiti-global.com Back-up : Chae Hong Kim T (822)3451-7066 E chkim@kr.kotiti-global.com

111, Sagimakgol-ro, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea T (822)3451-7000 F (822)3451-7177 W www.kotiti-global.com

1. The test results contained in this report are limited to results on the sample(s) that is provided by client and are not necessarily indicative or representative of the qualities of the lot from which the sample(s) was taken or of all products.
2. Further use of the results of this report is prohibited unless allowed under a separate agreement set forth in an official document that is established between the client identified on this letter and the KOTITI Testing & Research Institute.
3. The test result in this report is not related to accreditation of KS Q ISO/IEC 17025 and KOLAS.
4. You can verify the authenticity by the QR code at the bottom right side of the issued report, or access <http://cs.kotiti-global.com> and enter the test report number



**Sample breakdown list for RSL**

No.	Key code	Sample Description
1	A1	Shell white fabric
2	A2	Lining white fabric
3	A3	Filter black fabric
4	A4	Filter white fabric
5	A5	Ear strap white e-band
6	A1+A2+A5	Shell white fabric+ Lining white fabric+ Ear strap white e-band

+ : Composite test

**Arylamines, mg/kg**  
(KS K 0147:2015/KS K 0739:2017)

Test Conducted	Test Results	Requirements
	A1+A2+A5	
4-aminobiphenyl (92-67-1)	ND	
benzidine (92-87-5)	ND	
4-chloro-o-toluidine (95-69-2)	ND	
2-naphthylamine (91-59-8)	ND	
o-aminoazotoluene (97-56-3)	ND	
2-amino-4-nitrotoluene (99-55-8)	ND	
4-chloroaniline (106-47-8)	ND	
2,4-diaminoanisole (615-05-4)	ND	
4,4'-diamino-diphenylmethane (101-77-9)	ND	
3,3'-dichlorobenzidine (91-94-1)	ND	
3,3'-dimethoxybenzidine (119-90-4)	ND	
3,3'-dimethylbenzidine (119-93-7)	ND	
4,4'-methylenedi-o-toluidine (838-88-0)	ND	
p-cresidine (120-71-8)	ND	
4,4'-methylene-bis-(2-chloroaniline) (101-14-4)	ND	
4,4'-oxydianiline (101-80-4)	ND	
4,4'-thiodianiline (139-65-1)	ND	
o-toluidine (95-53-4)	ND	
2,4-toluylenediamine (95-80-7)	ND	
2,4,5-trimethylaniline (137-17-7)	ND	
o-anisidine (90-04-0)	ND	
4-aminoazobenzene (60-09-3)	ND	
2,4-xylidine (95-68-1)	ND	
2,6-xylidine (87-62-7)	ND	

ND (Not Detected) : Less than 5 mg/kg

Note) Baby's/ Children's textile products, Underwear, Middlewear, Outerwear & Bedding : less than(below) 30 mg/kg Azo dyes, which is capable of forming 4-aminoazobenzene, produce aniline and 1,4-phenylenediamine under the conditions of testing process. Due to the limit of detection, only aniline can be detected. The presence of these dyes must be tested in accordance with KS K 0739 as needed.

**Allergenic Disperse Dyes, mg/kg  
(KS K 0736:2014)**

Test Conducted	Test Results			Requirements
	(A)-A1	(A)-A2	(A)-A5	
Disperse Blue 1 (2475-45-8)	ND	ND	ND	
Disperse Blue 3 (2475-46-9)	ND	ND	ND	
Disperse Blue 7 (3179-90-6)	ND	ND	ND	
Disperse Blue 26 (3860-63-7)	ND	ND	ND	
Disperse Blue 35 (12222-75-2)	ND	ND	ND	
Disperse Blue 102 (12222-97-8)	ND	ND	ND	
Disperse Blue 106 (12223-01-7)	ND	ND	ND	
Disperse Blue 124 (61951-51-7)	ND	ND	ND	
Disperse Brown 1 (23355-64-8)	ND	ND	ND	
Disperse Orange 1 (2581-69-3)	ND	ND	ND	
Disperse Orange 3 (730-40-5)	ND	ND	ND	
Disperse Orange 37/76/59 (12223-33-5/ 13301-61-6/ 51811-42-8)	ND	ND	ND	
Disperse Orange 149 (85136-74-9)	ND	ND	ND	
Disperse Red 1 (2872-52-8)	ND	ND	ND	
Disperse Red 11 (2872-48-2)	ND	ND	ND	
Disperse Red 17 (3179-89-3)	ND	ND	ND	
Disperse Yellow 1 (119-15-3)	ND	ND	ND	
Disperse Yellow 3 (2832-40-8)	ND	ND	ND	
Disperse Yellow 9 (6373-73-5)	ND	ND	ND	
Disperse Yellow 23 (6250-23-3)	ND	ND	ND	
Disperse Yellow 39 (12236-29-2)	ND	ND	ND	
Disperse Yellow 49 (54824-37-2)	ND	ND	ND	

ND (Not Detected) : Less than 20 mg/kg

Note) Baby's / Children's textile products : less than(below) 50 mg/kg, Underwear: Ban to use

**pH**  
(KS K ISO 3071:2005)

Test Conducted	Test Results			Requirements
	(A)-A1	(A)-A2	(A)-A5	
	6.4	6.2	6.6	

Note) Baby's/ Children's textile products/ Underwear & Middlewear: 4.0 ~ 7.5, Outerwear & Bedding : 4.0 ~ 9.0

**Formaldehyde, mg/kg**  
(KS K ISO 14184-1:1998, water extraction method)

Test Conducted	Test Results			Requirements
	(A)-A1	(A)-A2	(A)-A5	
	ND	ND	ND	

ND (Not Detected) : Less than 20 mg/kg

Note) Baby's textile products: Less than(below) 20 mg/kg, Children's textile products, Underwear & Middlewear: less than(below) 75 mg/kg, Outerwear & Bedding : less than(below) 300 mg/kg

**APEOs (Alkylphenoethoxylates), mg/kg**  
(Safety Confirmation Safety Standard Annex 1.A(NP) / ISO 18254-1:2016 (NPEO) )

Test Conducted	Test Results			Requirements
	(A)-A1	(A)-A2	(A)-A5	
Sum of Nonylphenols(NPs) ①+②	ND	ND	ND	
4-n-Nonylphenol (104-40-5) ①	ND	ND	ND	
4-Nonylphenol (25154-52-3) ②	ND	ND	ND	
Nonylphenoethoxylates(NPEOs) (68412-54-4)	ND	ND	ND	

ND (Not Detected) : NP, OP: Less than 10 mg/kg NPEOs, OPEOs : Less than 30 mg/kg

Note) Baby / Children's textile products: NPs, NPEOs The total amount less than 100

**Dimethylformamide(DMFo)**  
(Solvent extraction, GC-MS (ISO/TS 16189 Mod.))

Test Conducted	Test Results				Requirements
	(A)-A1	(A)-A2	(A)-A4	(A)-A3	
Dimethylformamide(DMF)(68-12-2)	ND	ND	ND	ND	
N,N-Dimethylacetamide(DMAc)(127-19-5)	ND	ND	ND	ND	

ND (Not Detected) : Less than 5 mg/kg

- End of Report -

Photo of the submitted sample(s)

