

# TEST REPORT



**APPLICANT :** DKC COSMETIC., CO.LTD

**REPORT NO.** : F232-20-10602

**SAMPLE RECEIVED DATE** : 2020-04-01

**TEST STARTED DATE** : 2020-04-01

**REPORT ISSUED DATE** : 2020-04-07

**PAGE** : 1 OF 6

**DESCRIPTION :** TWO(2) PIECES OF SUBMITTED CUTTING SAID TO BE MASK AND KNIT FABRIC.

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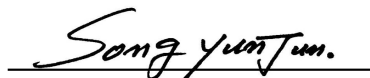
ITEM : MASK BL-001 - #1 MASK, #2 KNIT FABRIC  
COLOR NAME : #1~#2 BLACK

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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



YUN JUN, SONG  
QUALITY MANAGER

AUTHORIZED BY  
FOR FITI



JE-GOO JUN  
PRESIDENT

※ Report Verification No.: B4GR-5LGQ-KLLT ※

(You can see the authenticity of your test report through the above "Report Verification No." at FITI homepage.)

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**01. ARYLAMINES ( KS K 0147 : 2015 ) : mg/kg**

	#1
4-AMINOBIIPHENYL	< 5
BENZIDINE	< 5
4-CHLORO-o-TOLUIDINE	< 5
2-NAPHTHYLAMINE	< 5
o-AMINOAZOTOLUENE	< 5
2-AMINO-4-NITROTOLUENE	< 5
4-CHLOROANILINE	< 5
2,4-DIAMINOANISOLE	< 5
4,4'-DIAMINO-DIPHENYLMETHANE	< 5
3,3'-DICHLOBENZIDINE	< 5
3,3'-DIMETHOXYBENZIDINE	< 5
3,3'-DIMETHYLBENZIDINE	< 5
4,4'-METHYLENEDI-o-TOLUIDINE	< 5
p-CRESIDINE	< 5
4,4'-METHYLENE-BIS-(2-CHLOROANILINE)	< 5
4,4'-OXYDIANILINE	< 5
4,4'-THIODIANILINE	< 5
o-TOLUIDINE	< 5
2,4-TOLUYLENEDIAMINE	< 5
2,4,5-TRIMETHYLANILINE	< 5
o-ANISIDINE	< 5
4-AMINOAZOBENZENE	< 5
2,4-XYLIDINE	< 5
2,6-XYLIDINE	< 5

NOTE) · DETECTION LIMIT = 5 mg/kg

- < = LESS THAN
- ANALYSIS WAS CONDUCTED WITH GC-MS. IF DETECTED, IT WAS CONFIRMED BY HPLC-MS.
- 4-AMINOBIIPHENYL (CAS NO. 92-67-1), 2-NAPHTHYLAMINE (CAS NO. 91-59-8) ,  
2,4-DIAMINOANISOLE (CAS NO. 615-05-4) : THE USE OF BANNED AZO COLORANTS CANNOT BE RELIABLY ASCERTAINED WITHOUT ADDITIONAL INFORMATION.
- AZO COLORANTS THAT ARE ABLE TO FORM 4-AMINOAZOBENZENE (CAS NO. 60-09-3), GENERATE UNDER THE CONDITION OF THIS METHOD ANILINE (CAS. NO. 62-53-3) AND 1,4-PHENYLENEDIAMINE (CAS NO. 106-50-3). IF ANILINE OR 1,4-PHENYLENEDIAMINE IS BELOW 1 mg/kg, 4-AMINOAZOBENZENE IS CONSIDERED AS "LESS THAN DETECTION LIMIT (< 5 mg/kg)". OTHERWISE, THE PRESENCE OF 4-AMINOAZOBENZENE WILL BE VERIFIED BY TEST METHOD OF KS K 0739 : 2017

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**02. FORMALDEHYDE CONTENT ( KS K ISO 14184-1 : 1998 ) : mg/kg**

	#1
	NOT DETECTED

NOTE) DETECTION LIMIT = 20 mg/kg  
NOT DETECTED = LESS THAN DETECTION LIMIT

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

	#1
	6.4

NOTE) THE TYPE OF SOLUTION USED : KCl SOLUTION (pH 5.7)  
THE TEMPERATURE OF EXTRACTING SOLUTION : 22.4 °C

**04. HARMFUL SUBSTANCE EXTRACTION ( MOTIE NOTIFICATION No.2017-18 "COMMON SAFETY STANDARDS FOR CHILDREN'S PRODUCT" ) : mg/kg**

	#1
ANTIMONY (Sb)	< 10
ARSENIC (As)	< 10
BARIUM (Ba)	< 10
CADMIUM (Cd)	< 10
CHROME (Cr)	< 10
LEAD (Pb)	< 10
MERCURY (Hg)	< 10
SELENIUM (Se)	< 10

NOTE) DETECTION LIMIT = 10 mg/kg  
THE SAMPLE WAS EXTRACTED BY USE OF 0.07 mol/L HCl SOLUTION FOR 2 h AT 37 °C.  
< = LESS THAN

**05. TOTAL LEAD(Pb) CONTENT ( MOTIE NOTIFICATION No.2017-18 "COMMON SAFETY STANDARDS FOR CHILDREN'S PRODUCT" ) : mg/kg**

	#1
	< 10

NOTE) DETECTION LIMIT = 10 mg/kg  
< = LESS THAN

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**06. TOTAL CADMIUM(Cd) CONTENT ( MOTIE NOTIFICATION No.2017-18 "COMMON SAFETY STANDARDS FOR CHILDREN'S PRODUCT" ) : mg/kg**

	#1
	< 10

NOTE) DETECTION LIMIT = 10 mg/kg  
< = LESS THAN

**07. PHTHALATES CONTENTS ( MOTIE NOTIFICATION No.2017-18 "COMMON SAFETY STANDARDS FOR CHILDREN'S PRODUCT" ) : %**

	#1
DNOP	< 0.01
DEHP	< 0.01
BBP	< 0.01
DBP	< 0.01
DINP	< 0.01
DIDP	< 0.01

NOTE) DETECTION LIMIT = 0.01 %  
DEHP = DI(2-ETHYLHEXYL)-PHTHALATE  
DBP = DIBUTYLPHTHALATE  
BBP = BENZYL BUTYLPHTHALATE  
DnOP = DI-n-OCTHYL PHTHALATE  
DINP = DI-ISO-NONYL PHTHALATE  
DIDP = DIISODECYL PHTHALATE  
< = LESS THAN

**08. WATER VAPOUR PERMEABILITY ( KS K 0594 : 2015, CALCIUM CHLORIDE METHOD ) : g/(m<sup>2</sup> · 24 h)**

	#2
	10 154

NOTE) THE TEST RESULT WAS CONVERTED INTO 24 h UNITS.

**09. AIR PERMEABILITY ( KS K ISO 9237 : 1995 ) : mm/s**

	#2
	272

NOTE) TEST AREA : 20 cm<sup>2</sup>  
APPLIED PRESSURE : 100 Pa

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**10. ULTRA VIOLET BLOCKING ( KS K 0850 : 2019 ) : %**

	#2
UV-R BLOCKING	> 99.9
UV-A BLOCKING	> 99.9
UV-B BLOCKING	> 99.9

NOTE) · MEASURING INSTRUMENT : UV-VIS-NIR SPECTROPHOTOMETER  
(PerkinElmer\_Lambda 1050 with 150 mm InGaAs Int. Sphere)

- WAVELENGTH RANGE : UV-R : 290 nm ~ 400 nm  
UV-A : 315 nm ~ 400 nm  
UV-B : 290 nm ~ 315 nm
- WAVELENGTH INTERVAL : 5 nm

**11. TENSILE STRENGTH ( KS M ISO 1798 : 2008 ) : kPa**

	#2
	732.0

NOTE) SPECIMEN SHAPE : 1A

**12. DIMENSIONAL STABILITY TO HAND WASHING ( KS K 0021 : 2018, 106 METHOD, 5 MINUTES HAND WASH AT (30 ± 3) °C, NEUTRAL DETERGENT, FLAT DRY ) : %**

	#2
LENGTH	-0.5
WIDTH	-0.5

NOTE) (+) MEANS EXTENSION, (-) MEANS SHRINKAGE

**13. COLORFASTNESS TO ACTUAL HAND WASHING ( MODIFIED KS K 0021 : 2018, 106 METHOD, 5 MINUTES HAND WASH AT (30 ± 3) °C, NEUTRAL DETERGENT, FLAT DRY ) : GRADE**

	#1
COLOR CHANGE	4-5
COLOR STAINING	
- COTTON	4-5
- POLYESTER	4-5

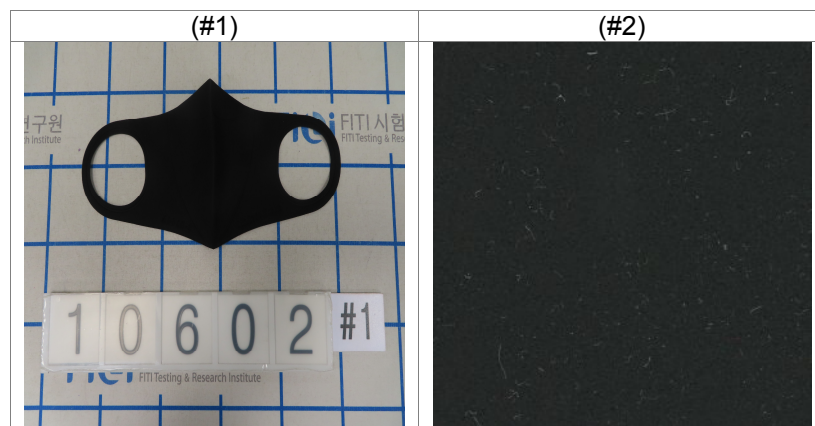
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**14. COLORFASTNESS TO LIGHT AND PERSPIRATION ( KS K 0701 : 2014, METHOD B, THE XENON ARC LAMP APPARATUS USED, EXPOSRE CYCLE A1, GREY SCALE ) : GRADE**

	#1
ACID	4-5
ALKALI	4-5

**\*\* End of The Report \*\***



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