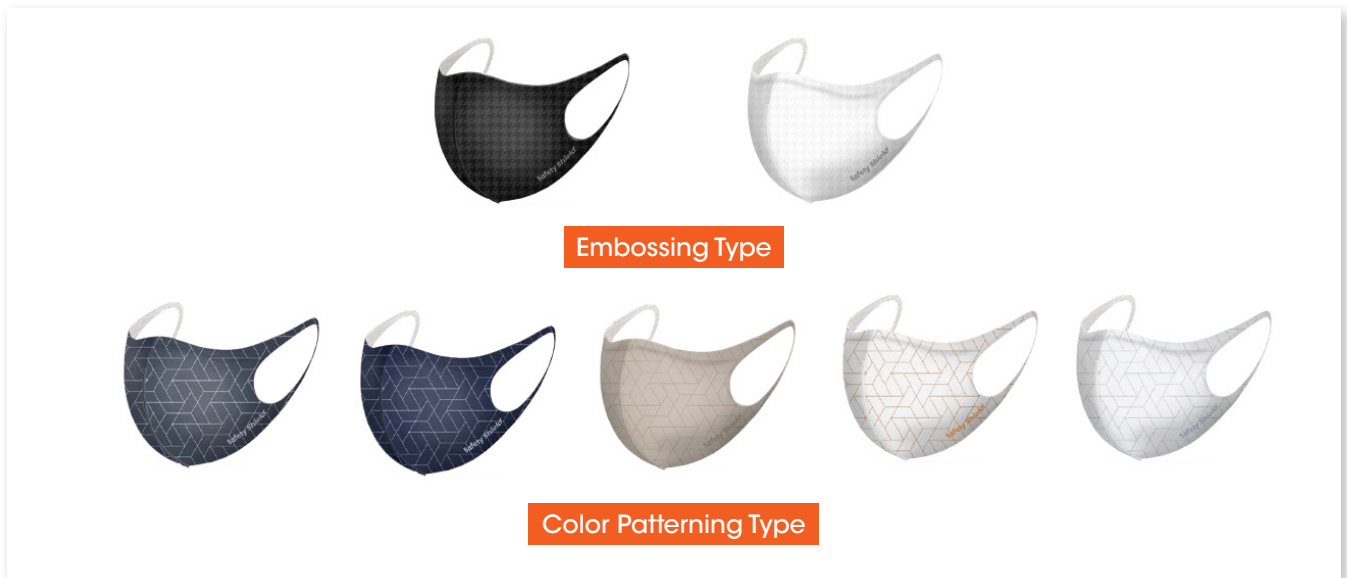


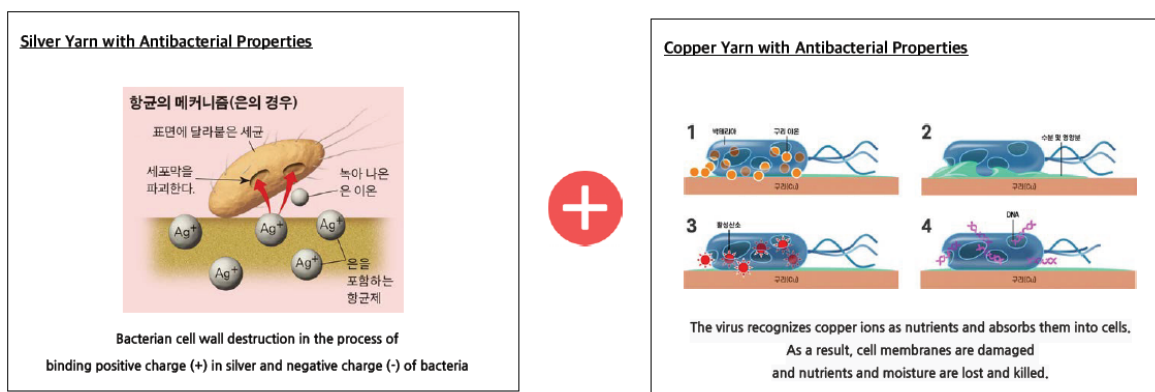
## Safety Shield Facial Mask



### Antimicrobial Facial Mask made of Silver and Copper Yarn

- ▶ Stable antibacterial activity by using patented silver and copper yarn
- ▶ Prevent splash penetration with hydrophobic structured outer
- ▶ Proven water resistance test in antibacterial activity 20 times washing
- ▶ FDA Registered & Hohenstein certified
- ▶ Flexible CTO (Customer To Order) Production based on DTP (Digital Textile Printing)

### The Key Properties of Silver and Copper Yarn



The combination of silver and copper yarn has the effect eliminating the growth of bacteria that cause odors, resulting in excellent deodorant performance.

## Safety Shield Facial Mask

### Anti-Splash Penetration thru Coating Technology

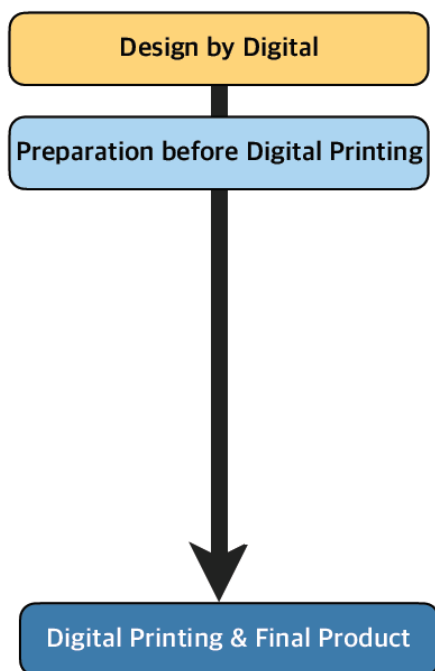
Anti-Splash Penetration + Easily Breathable Penetration



It is optimized for the era of virus storms such as Corona 19 by maximizing the ability to block splashes from the outside and easy to breathe in daily life.

### DTP (Digital Textile Printing) Technology with Fashion

Efficient Production and Flexible Design by Digital Textile Printing



#### Benefits

- ▶ Environment-friendly process such as minimizing waste-water
- ▶ Low emission with energy-savings
- ▶ Optimized for small batch production with various design
- ▶ Applicable to the various materials



Capable of private or public sector promotion by flexible production



## Safety Shield Facial Mask

### Securing washing resistance with reliability

"High reliability to maintain deodorant properties as well as antibacterial and splash-blocking even after washing"



▶ Antibacterial activity upto 99.9% after 30 times-wasing



▶ Anti-Splash Penetration after 30 times-wasing

Minimization of cost  
from the perspective of  
Customer and Society

Besides, other properties such as cool feeling, deodorization rate, and UV protection in the later pages.

### US FDA Registered & Germany Hohenstein Certified

#### US FDA Registered



#### Germany Hohenstein Certified





# Safety Shield Facial Mask

## Performance Test: Anti-bacterial & Anti-splash

Anti-bacterial Activity: 99.9% after 30-times wasing

Anti-Splash: Level4 after 30-times wasing  
(The highest level is 5)

 <div> (08511) 302-254, Beokbok-ro, Geumcheon-gu, Seoul, Korea  Tel : 02-2113-8135 Fax : 02-2113-8130 </div>				
REPORT NO. : N288-20-00212				
PAGE : 2 OF 6				
01. ANTIBACTERIAL ACTIVITY OF TEXTILES (KS K 0693 : 2016) : CFU/mL, BACTERIOSTATIC REDUCTION RATE %				
		THE NUMBER OF BACTERIA AFTER INOCULATION	THE NUMBER OF BACTERIA AFTER 18 h	BACTERIOSTATIC REDUCTION RATE
BACTERIA-1	BLANK	$1.7 \times 10^4$	$8.7 \times 10^5$	-
	FACE (THE 30ST WASHING)	-	< 10	99.9
	BACK (THE 30ST WASHING)	-	< 10	99.9
BACTERIA-2	BLANK	$1.7 \times 10^4$	$2.7 \times 10^7$	-
	FACE (THE 30ST WASHING)	-	$3.9 \times 10^2$	99.9
	BACK (THE 30ST WASHING)	-	< 10	99.9
<small>NOTE) STANDARD FABRIC : COTTON  NONIONIC SURFACTANT AGENTS : TWEEN 80, 0.05 %  TEST BACTERIA : BACTERIA-1 : <i>Staphylococcus aureus</i> ATCC 6538  TEST BACTERIA : BACTERIA-2 : <i>Klebsiella pneumoniae</i> ATCC 4352</small>				

 <div> (08511) 302-254, Beokbok-ro, Geumcheon-gu, Seoul, Korea  Tel : 02-2113-8135 Fax : 02-2113-8130 </div>				
REPORT NO. : N231-20-08231				
PAGE : 2 OF 2				
01. RESISTANCE TO SURFACE WETTING (KS K ISO 4920 : 2014, SPRAY TEST) : RATING				
		#1		
AFTER THE 30TH WASH		4	4	4
<small>NOTE) THE TEMPERATURE OF THE WATER : (20.0 ± 1.0) °C  WASHING CONDITION : KS K 0021 : 2018, 106 METHOD (30 ± 3) °C, 5 MIN HAND WASH, FLAT DRY</small>				

## Performance Test: Washing-fastenss & Deodorization

Washing-fastenss: Level 4~5  
(Almost Perfect)

Deodorization: 99% eliminated within 60 minutes

TEST ITEM	TEST RESULT
	#1
Color Fastness to Hand washing (grade) : TMC TM 250 : 2009 ((40 ± 2) °C, 30 min, ECE A Detergent)	
Color Change	4-5
Stain(Acetate)	4-5
Stain(Cotton)	4-5
Stain(Polyamide)	4-5
Stain(Polyester)	4-5
Stain(Acrylic)	4-5
Stain(Wool)	4-5

Assessment of Deodorization Activity (%) : Gas Detector method	
<Test Times>	
30 min.	98
60 min.	99
90 min.	99
120 min.	99
<Note> 1. Test condition :	
- Sample size : 10 × 10 cm( g)	
- Test gas : Ammonia (NH <sub>3</sub> )	
- Injected Conc. of gas : 500 μg/mL	
- Volume of test vessel : 1000 mL	
2. Test environment : Temp. °C, Humidity %	
3. Deodorization Rate(%) = [(Conc.of blank - Conc.of specimen) / Conc.of blank] X 100	

## Performance Test: UV Blocking & Cool Feeling

Uv Blocking: Above 99%

Cool Feeling

Performance of Blocking of Ultraviolet : Modified KS K 0850:2014	
UV Protection Factor	
UPF Rating	1 329.9
Blocking % of UV(%)	50+
UV-A(315-400 nm)	99.5
UV-B(290-315 nm)	99.9
▷ Test Condition	
1. Analyzer : UV Transmittance Analyzer(Labsphere Co. USA)	
2. Light source : Xenon Arc	
3. SPF Solar Irradiance : AS/NZS 4399 APPENDIX B:1996	
4. SPF Rating(Classification) : Refer to AS/NZS 4399:1996	

Measurement of Cool Feeling (J/㎡/s)	
QMAX	
Back	0.153
* Note) 1. Test machine : THERMOFEEL, PF-QMM-01	
2. Test environment : Temperature : (20±2) °C, Humidity : (65±4) % R.H.	
3. The temperature difference between a thermometer and a specimen : Δ 10 °C	

Preventing the formation of sports, freckles and skin aging by UV-block and about 10% superior to 0.14 of the existing cold feeling material.

# Safety Shield Facial Mask

## Performance Test: UHeavy-Metal Contents Test & KC Certificate for Kid

Extractable Heavy-Metal Content (mg/kg) : KS G ISO 8124-3:2013	
Antimony(Sb)	11.5
Arsenic(As)	< 2
Barium(Ba)	< 5
Cadmium(Cd)	< 5
Chromium(Cr)	< 5
Lead(Pb)	< 5
Mercury(Hg)	< 2
Selenium(Se)	< 5

\* Note> 1. Detection Limit : Sb, Ba, Cd, Cr, Pb, Se ~ 5 mg/kg, As, Hg ~ 2 mg/kg  
2. Instrument : ICP/AE

Increased safety to the maximum by showing a reduction of more than 93% compared to the allowable value of KC children's standards.

**KATRI** Korea Appraisal Testing & Research Institute

Deoksugwan-ro 19, Anyang-dong, Wonmi-gu, Anyang-si, Gyeonggi-do, Korea  
T : +82-31-598-0000 F : +82-31-598-6780  
www.katri.co.kr

**KATRI** DOCUMENT SERVICE

**COPY**

**TEST REPORT**

APPLICANT : OOOOOTECH KATRI NO : KATRI20-00001477  
BUYER : RECEIVED DATE : JUN. 17, 2020  
ISSUED DATE : JUN. 23, 2020  
PAGE(S) : 1 OF 6

APPLICANT'S PROVIDED SAMPLE DESCRIPTION :  
ONE(1) SAMPLE OF FABRIC MASK  
STYLE NO. : Safety shield mask for summer ASKIN L/GRAY

TEST ITEM	TEST RESULT	REQUIREMENTS
pH : Supplier's Confirmation of Conformity Standards Part 15 6.2.1 (KS K ISO 3071 : 2005)	6.0	4.0 ~ 7.5
<Note> 1. Type of solution : 0.1 mol/L HCl solution 2. Instrument : pH meter		
Formaldehyde Content (mg/kg) : Supplier's Confirmation of Conformity Standards Part 15 6.2.2 (KS K ISO 14184-1 : 1995)	N.D.	< 75
<Note> 1. N.D. : Not Detected(Less than 20 mg/kg) 2. Instrument : UV/VIS Spectrophotometer		

~ Continue ~

Tested by Name : Hong Yoo Jin (signature) (signature) Lim, Hun Jin (signature)  
Location of Test : Deoksugwan-ro 19, Anyang-dong, Wonmi-gu, Anyang-si, Gyeonggi-do, Korea

## Comparative Advantage of Safety Shield Facial Mask

Item	KF94, KF80 Mask (Strongest protection)	KF-AD Mask (Antidroplet)	Surgical Mask (Medical use)	Safety Shield Mask
Shape	3 Dementional	3D or 2D	2 Dementional	3 Dementional
fit-testing	Closed	Closed/ Uplifting at the edge	Uplifting at the edge	Closed
Antidroplet	Good	Normal	Normal	Good
Antibacterial Level	99%	80%	80%	99.00%
Washing resistance	Impossible	Impossible	Impossible	Over 30 times without loosing function above
breathing resistance	Not easy to breath in and out	Not easy to breath in and out	Not easy to breath in and out	Easy to breath in and out
Cool feeling	Not have	Not have	Not have	Have ( 0.153% KATRI TEST)
Color Option	Black/White	Black/White	Black/White/Blue	Various ( 7 color or pattern)