PATH-GUARD

OOH PLANET™
HEALTH - EDUCATION - EQUALITY

1948 KV99.81

3M NEXCARE ALTERNATIVE

1984 KV99.81

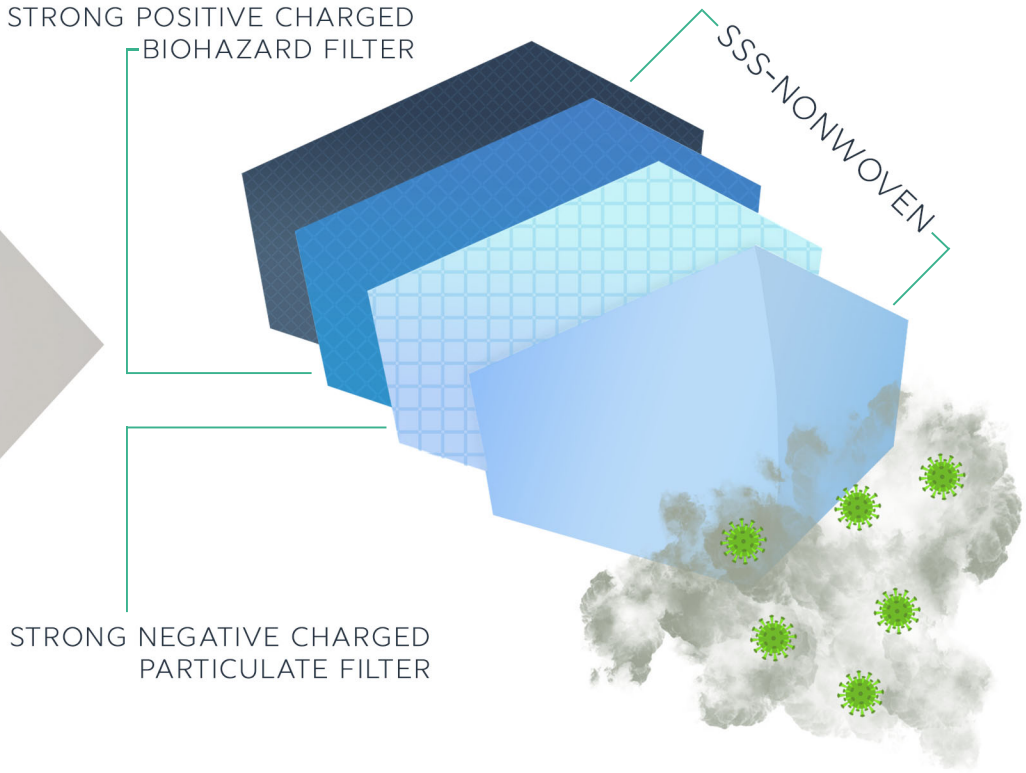
3M 1870 ALTERNATIVE

2020 KV99.81

3M 1860 ALTERNATIVE

KV99.81 4-LAYER **COVID-19 KILLING** MASK/RESPIRATOR

PROTECTED BY PATH-GUARD



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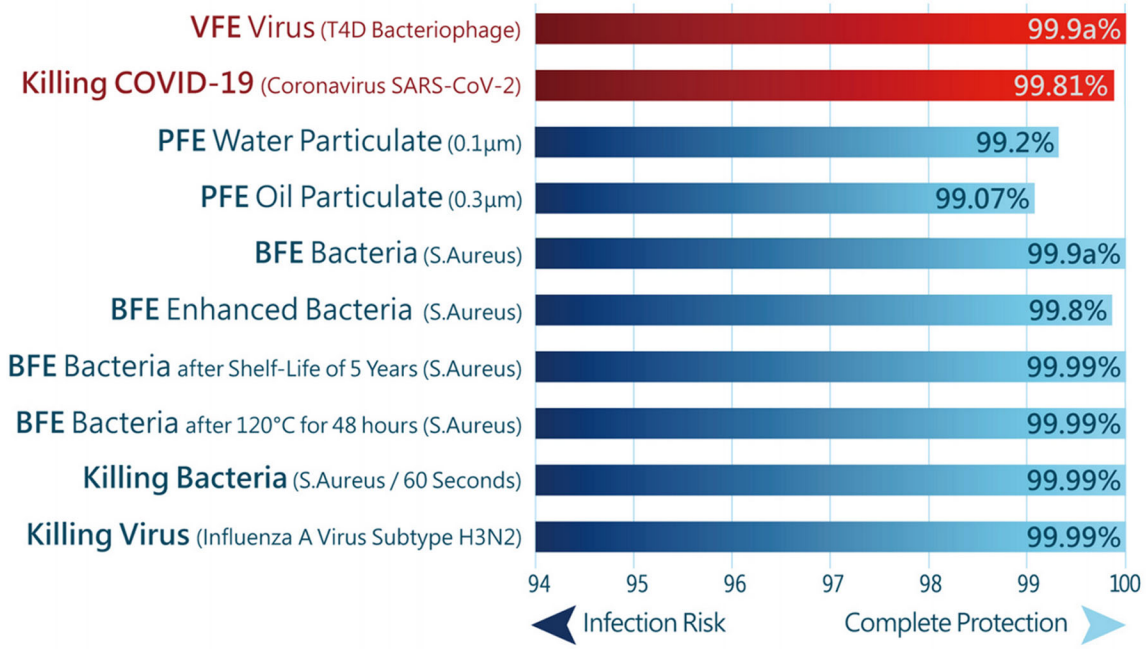
EFFICIENCY



PROPERTIES

Test	
Differential Pressure (mmH₂O)	5
Fluid Resistance (mmHg)	160
Flame Spread (Second)	5
Microbio Cleanliness (cfu)	17
Shelf Life (Year)	5

ASTM F2101 Level 3
US Medical Face Masks Standard

EN14683 TYPE IIR
EU Surgical Masks Standard

Core Filtration Material - Made in Taiwan / Hong Kong

Formula - Food Additives Approved by World Health Organization (WHO)

OOH technology pass chemical safety standards for baby textile products on
EN ISO 21084:2019
EN ISO 18254:2016
EN ISO 14184:2011
JIS L 1041
DIN EN ISO 17070:2015
64 LFBG B 82.02-08
EN ISO 14389: 2014
US CPSC-CH-C1001-09.4

VIRAL FILTRATION EFFICIENCY 99.9a% / KILLING COVID-19 99.81%

Production process is determined to be a non-hazardous process according to EU Dangerous Preparation Directive 1999/45/EC

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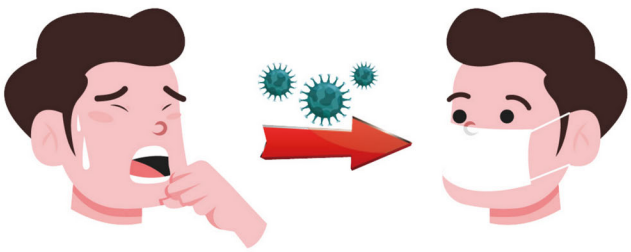
PATH-GUARD

- THE FIRST FACE MASKS PROVEN TO **KILL COVID-19 (99.81%)**
- COMBINED WITH VIRAL FILTRATION EFFICIENCY **VFE (>99.8a%)**
- OVER **500 TIMES MORE EFFECTIVE** THAN TRADITIONAL MASKS

FDA CE Health Canada Australian Government Department of Health Therapeutic Goods Administration ANVISA CCCMHPIE KOTITI Testing & Research Institute ISO 9001 ISO 14001 ISO 13485
Nelson Labs A Sotera Health company intertek Total Quality. Assured. BUREAU VERITAS TTRI Taiwan Textile Research Institute 广东省微生物分析检测中心 Guang Dong Detection Center Of Microbiology ATCCR 善通 香港公開大學 THE OPEN UNIVERSITY OF HONG KONG

PATH-GUARD

PRIMARY INFECTION



BREATHING
> 1,000 COVID-19 VIRUSES

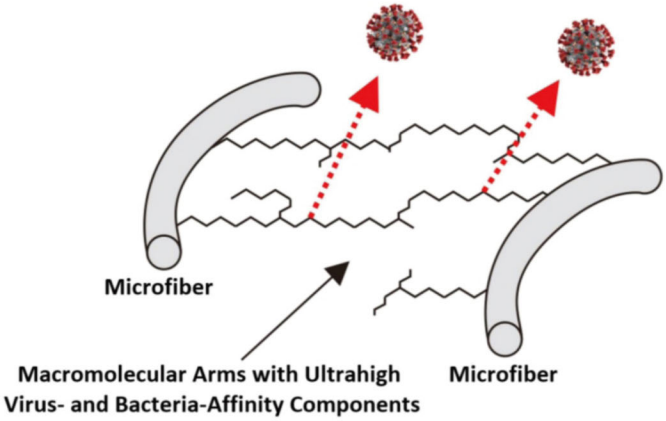
COUGHING
> 1,000,000 COVID-19 VIRUSES

INFECTION
BREATHING IN > 100 ACTIVE COVID-19 VIRUSES

SECONDARY INFECTION

- VIRUSES CAN SURVIVE ON THE SURFACE OF TRADITIONAL MASKS FOR 7 DAYS
- VIRUSES CAN GROW 180 TIMES MORE AFTER 4 HOURS OF USAGE
- WE GET INFECTED BY TOUCHING MASKS WHEN THEY ARE FULL OF VIRUSES
- WE BRING MASKS WITH VIRUSES BACK HOME, AND CAUSE SECONDARY INFECTION IN OUR HOME ENVIRONMENT
- A COVID-19 KILLING MASK CAN FULLY PROTECT AGAINST SECONDARY INFECTION

HOW WE ARREST & KILL COVID

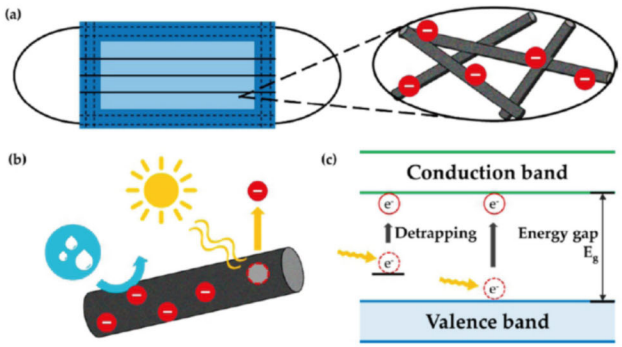


THE SPIKE PROTEIN OVER CORONAVIRUS HAS A **STRONG NEGATIVE CHARGE**.

THE **HIGHLY POSITIVE-CHARGED FIBERS** INSIDE PATH-GUARD SHIELD'S FILTRATION MATERIAL ATTRACTS & ARRESTS **STRONGLY NEGATIVE CHARGED** PROTEIN SPIKES ON VIRUSES AND BACTERIA.

STRONG ATTRACTION FORCE CAN TEAR OFF THE PROTEIN CHAIN OVER THE ENVELOPE OF CORONAVIRUS & ACHIEVE A **KILLING EFFECT**

SHORTCOMING OF TRADITIONAL MASKS



MELTBLOWN CLOTH RELIES ON ELECTROSTATIC TO CAPTURE BACTERIA & VIRUSES.
SURFACE PROTEINS OF BACTERIA AND VIRUSES ARE NEGATIVELY-CHARGED, AS IS THE ELECTROSTATIC ITSELF. THE POLARITY OF THE TWO IS THE SAME, THEREFORE IT REPELS - **INEFFICIENT** IN CAPTURING MICROBIALS.

ELECTROSTATIC ITSELF IS **UNSTABLE**, EASY TO DISSIPATE & DISCHARGE FROM HIGH TEMPERATURE AND HUMIDITY. A FEW HOURS AFTER THE MASK USED, THE FILTRATION EFFICIENCY BEGINS TO DECAY.

PATH-GUARD

1948 KV99.81

3M NEXCARE ALTERNATIVE

ARTICLE NO	1948 KV99.81
PRODUCT NAME	PATH-GUARD SHIELD DISPOSABLE SURGICAL FACE MASK
STANDARD APPLIED	EN 14683 TYPE IIR / ASTM LEVEL 3 / YY0469-2011
SPECIFICATION	FLAT, EAR-LOOP MASK, 17.5CMX9.5CM
MATERIAL	34% POSITIVE CHARGED BIOHAZARD FILTER 22% MELTBLOWN NON-WOVEN 44% NON-WOVEN FABRIC

MAIN PERFORMANCE

PARTICULATE FILTRATION EFFICIENCY (PFE)	> 99%
BACTERIAL FILTRATION EFFICIENCY (BFE)	> 99.99%
VIRAL FILTRATION EFFICIENCY (VFE)	> 99.9A%
BACTERIAL KILLING RATE	> 99.99%
H3N2 KILLING RATE	> 99.99%
COVID-19 KILLING RATE	99.81%
DIFFERENTIAL PRESSURE	< 5 MMH20
SPLASH RESISTANCE PRESSURE	< 160 MMHG
MICROBIAL CLEANLINESS	< 30 CFU/G
FLAME SPREAD	< 5 SECONDS
SHELF LIFE	5 YEARS

PACKING DETAILS	1 CARTON X 40 BOXES X 50 PIECES
CARTON SIZE	570MM X 390MM X 420MM
GROSS WEIGHT	9.2KG

1984 KV99.81

3M 1870 ALTERNATIVE

ARTICLE NO	1984 KV99.81
PRODUCT NAME	PATH-GUARD SHIELD DISPOSABLE FOLDABLE RESPIRATOR
STANDARD APPLIED	EN 149 FFP2 / EN 14683 TYPE IIR / ASTM LEVEL 3
SPECIFICATION	FOLDABLE, 10.7CM X 16CM
MATERIAL	34% POSITIVE CHARGED BIOHAZARD FILTER 22% MELTBLOWN NON-WOVEN 44% NON-WOVEN FABRIC

MAIN PERFORMANCE

PARTICULATE FILTRATION EFFICIENCY (PFE)	> 99%
BACTERIAL FILTRATION EFFICIENCY (BFE)	> 99.99%
VIRAL FILTRATION EFFICIENCY (VFE)	> 99.9A%
BACTERIAL KILLING RATE	> 99.99%
H3N2 KILLING RATE	> 99.99%
COVID-19 KILLING RATE	99.81%
DIFFERENTIAL PRESSURE	< 5 MMH20
SPLASH RESISTANCE PRESSURE	< 160 MMHG
MICROBIAL CLEANLINESS	< 30 CFU/G
FLAME SPREAD	< 5 SECONDS
SHELF LIFE	5 YEARS

PACKING DETAILS	1 CARTON X 20 BOXES X 30 PIECES
CARTON SIZE	645MM X 310MM X 300MM
GROSS WEIGHT	4.9KG

2020 KV99.81

3M 1860 ALTERNATIVE

ARTICLE NO	2020 KV99.81
PRODUCT NAME	PATH-GUARD SHIELD DISPOSABLE CUP SHAPED RESPIRATOR
STANDARD APPLIED	EN 149 FFP2 / EN 14683 TYPE IIR / ASTM LEVEL 3
SPECIFICATION	CUP SHAPED, 10.7CM X 16CM
MATERIAL	34% POSITIVE CHARGED BIOHAZARD FILTER 22% MELTBLOWN NON-WOVEN 44% NON-WOVEN FABRIC

MAIN PERFORMANCE

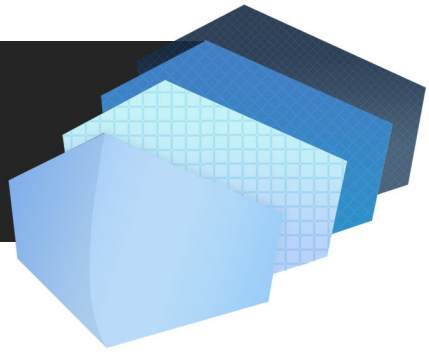
PARTICULATE FILTRATION EFFICIENCY (PFE)	> 99%
BACTERIAL FILTRATION EFFICIENCY (BFE)	> 99.99%
VIRAL FILTRATION EFFICIENCY (VFE)	> 99.9A%
BACTERIAL KILLING RATE	> 99.99%
H3N2 KILLING RATE	> 99.99%
COVID-19 KILLING RATE	99.81%
DIFFERENTIAL PRESSURE	< 5 MMH20
SPLASH RESISTANCE PRESSURE	< 160 MMHG
MICROBIAL CLEANLINESS	< 30 CFU/G
FLAME SPREAD	< 5 SECONDS
SHELF LIFE	5 YEARS

PACKING DETAILS	1 CARTON X 20 BOXES X 30 PIECES
CARTON SIZE	645MM X 310MM X 300MM
GROSS WEIGHT	4.9KG

PATH-GUARD

VIRAL FILTRATION EFFICIENCY **99.9a %**

KILLING COVID-19 **99.81 %**



ULTRA-PROTECTION

HIGHEST MEDICAL-GRADE PROTECTION (PFE > 99%, VFE / BFE > 99.9A%), MEETING ASTM F2101 LEVEL 3 AND EN14683 STANDARD, FOR A PEACE-OF-MIND.

ANTIVIRAL & ANTIBACTERIAL

KILLS COVID-19 (99.81%), VIRUSES (>99.99%) AND BACTERIA (>99.99%) IN SECONDS, GREATLY REDUCING RISK FOR SECONDARY INFECTION.

LIGHT & AIRY

ULTRA-HIGH BREATHABILITY FOR A MORE COMFORTABLE MASK EXPERIENCE.
50% MORE BREATHABLE VS COMPARABLE MASKS.

LONG-LASTING

HUMIDITY AND TEMPERATURE PROOF – PATH-GUARD SHIELD'S PATENTED, STRONG POLYCATIONIC NANOSTRUCTURE MAINTAINS ULTRAFILTRATION AND DISINFECTION EFFICIENCY.

IT CAN REMAIN BFE > 99.9a% AFTER CONDITIONING IN 120°C FOR 48 HOURS.

EFFECTIVE PERIOD MORE THEN FOR 5 YEARS UNDER OPTIMAL STORAGE CONDITIONS.

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PATH-GUARD

PATH-GUARD

QUALIFICATIONS & CERTIFICATIONS

US PATENT NUMBER
APPLICATION #62/988,900

HK PATENT NUMBER
32020008506.8

EMERGENCY USE AUTHORIZATION (EUA) FOR PPE & FILTERING FACEPIECE RESPIRATOR MANUFACTURER IN CHINA
GRANTED JUNE 6, 2020, UPDATED SEPTEMBER 4, 2020

EU CE DISPOSABLE MEDICAL FACE MASK CLASS I/ TYPE IIR - REGISTRATION NUMBER
DE/CA05/M P-238321-2557-00

EU CE EN149:2001+AL:2009 - FPC CERTIFICATE NO
CE-PC-200402-188-FPC-A
CE-PC-200402-188-01-9A
CE-PC-200402-FPC-B
CE-PC-200601-452-01-9A

CHINA CHAMBER OF COMMERCE FOR IMPORT AND EXPORT OF MEDICINES AND HEALTH PRODUCTS, WHITE LIST OF MEDICAL DEVICES AND SUPPLIES COMPANIES - UNIFIED SOCIAL CREDIT IDENTIFIER
91430181MA4PHUE510

AUSTRALIAN REGISTER OF THERAPEUTIC GOODS CERTIFICATE - ARTG IDENTIFIER
MEDICAL DEVICE INCLUDED CLASS 1
338879
337859
338878
337857

BRAZIL NATIONAL HEALTH SURVEILLANCE AGENCY ANVISA - REGISTRATION NUMBER
MEDICAL DEVICE CLASS 1 – 81702110005

PATH-GUARD

QUALIFICATIONS & CERTIFICATIONS

Health Canada

CANADA MEDICAL DEVICE ESTABLISHMENT LICENCE – LICENCE NUMBER
CLASS 1 MANUFACTURER – 14507

KOTITI Testing & Research Institute

KOREA TEXTILE INSPECTION & TESTING INSTITUTE REGISTRATION NUMBER
SUQ20-00040_M1
SUQ20-00041_M1

ISO

ISO9001:2015
CERTIFICATE NO: USA20Q40924R0M
ISO 14001:2015
CERTIFICATE NO: USA20E40925R0M
EN ISO 13485:2016
CERTIFICATE NO: CN20/42091

Nelson Labs. A Sotera Health company

VIRAL FILTRATION EFFICIENCY (VFE) IN ASTM F2101
PROVEN THAT PATH-GUARD SHIELD TECHNOLOGY
CAN EFFECTIVELY FILTER VIRUS (>99.9a%)

BACTERIAL FILTRATION EFFICIENCY WITH INCREASED DELIVERY CHALLENGE (BFE) IN ASTM F2101 AND EN14683
PROVEN THAT PATH-GUARD SHIELD TECHNOLOGY CAN EFFECTIVELY FILTER INCREASED CHALLENGE OF BACTERIA (99.8%)

intertek Total Quality. Assured.

VIRAL FILTRATION EFFICIENCY (VFE) IN ASTM F2101
PROVEN THAT PATH-GUARD SHIELD TECHNOLOGY CAN EFFECTIVELY FILTER VIRUS (>99.9a%)

PATH-GUARD

PRINCIPLES OF PROTECTION

ULTRA-PROTECTION

ACCORDING TO THE TEST PERFORMED BY THE OPEN UNIVERSITY OF HONG KONG, THE EXTREMELY STRONG POSITIVE CHARGE FROM THE BOTTOM LAYER OF PATH-GUARD SHIELD'S FIBER CAN BLOCK VIRUS AND BACTERIA BY TEARING THE OUTER ENVELOPE AND MEMBRANE OF VIRUS AND BACTERIA WITHIN 60 SECONDS.

KILLING RATE OF COVID-19	99.81%
KILLING RATE OF H3N2	> 99.99%
KILLING RATE OF BACTERIA	> 99.99%

TRADITIONAL MASKS ONLY ACT AS A BARRIER TO BLOCK BACTERIA OR VIRUSES FROM THE USER, BUT THEY DO NOT HAVE THE FUNCTION OF KILLING. THIS MEANS BACTERIA OR VIRUSES WILL START TO MULTIPLY ON THE MELTBLOWN FABRIC FIBRES; THEREFORE AFTER FEW-HOURS OF USAGE, THE MASK SURFACE BECOMES INFECTIOUS WITH BACTERIA AND VIRUSES, POTENTIALLY CAUSING SECONDARY INFECTION ON WHOEVER OR WHATEVER PERSON OR SURFACE IT COMES INTO CONTACT.

EFFECTIVE PERIOD

LONG-LASTING

PATH-GUARD SHIELD'S FILTRATION TECHNOLOGY MATERIAL WAS TESTED AGAINST STORAGE IN AN ENVIRONMENT OF 120°C FOR 48 HOURS, IN ACCORDANCE WITH ASTM F1980 STANDARD SIMULATING 5 YEAR STORAGE CONDITIONS. AFTER THE TEST, PATH-GUARD SHIELD'S FILTER MATERIALS STILL MAINTAINED HIGH EFFICIENCY (BFE > 99.99%) AND FUNCTION, ALLOWING FOR LONG TERM STORAGE THAT LARGE ENTERPRISES, GOVERNMENTS OR PUBLIC INSTITUTIONS REQUIRE.

FOR TRADITIONAL MASKS, THE EFFECTIVE PERIOD IS SHORT, AND IT IS MOST LIKELY DUE TO EXTERNAL FACTORS IN THE TRANSPORTATION PROCESS (SUCH AS HIGH TEMPERATURE OR IMPROPER STORAGE), ELECTROSTATIC LOSS OF THE MELTBLOWN IS SIGNIFICANT OVER-TIME, CAUSING THE PRODUCT TO BE INEFFECTIVE.

AIR PERMEABILITY

HIGH AIR PERMEABILITY

COMPARED WITH TRADITIONAL MASKS, THE AIR RESISTANCE IS REDUCED AND THE AIR PERMEABILITY IS HIGH, MAKING LONGER PERIODS OF USAGE MORE COMFORTABLE.

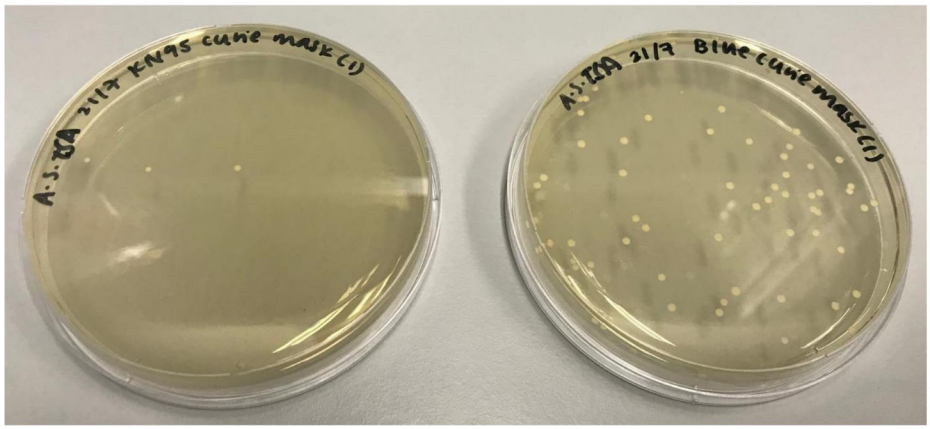
MOST TRADITIONAL MASKS SACRIFICE BREATHABILITY IN ORDER TO ACHIEVE THE HIGH FILTRATION EFFICIENCY EXPECTED BY USERS.

PATH-GUARD

PATH-GUARD SHIELD MASK VS TRADITIONAL DISPOSABLE MASK

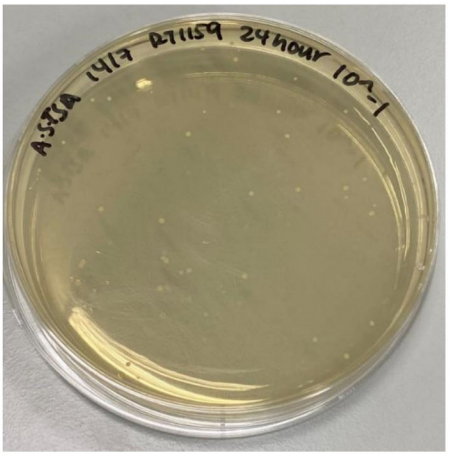
DIFFERENCE ON BACTERIAL FILTRATION EFFICIENCY (BFE) AFTER ELECTROSTATIC DISCHARGE

PATH-GUARD MASK (BFE > 99%)

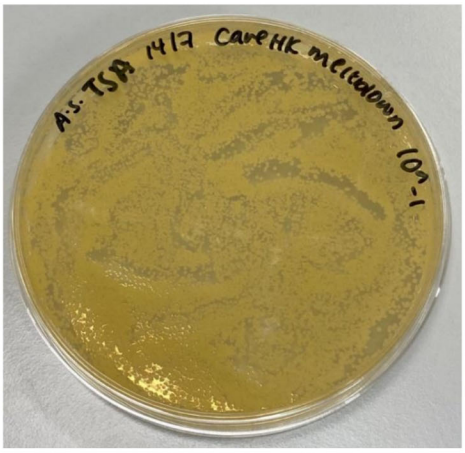


TRADITIONAL DISPOSABLE MASK USING MELTBLOWN (BFE < 90%)

DIFFERENCE ON BACTERIAL GROWTH AFTER 8 HOUR USE OF MASKS



PATH-GUARD MASK (ANTIBACTERIAL ACTIVITY > 99%)



TRADITIONAL DISPOSABLE MASK USING MELTBLOWN (FULL OF BACTERIA)