

98%  
protection  
from  
PM3

90%  
protection  
from  
PM0.3

Bio-  
degradable

SITRA  
Approved



Only Rs. 45/-

A product of IIT- Delhi Startup:

# Kawach



# Ecological Impact



Kawach is bio-degradable which will save huge masses of land and water from the hazardous waste of Covid-19, potentially the biggest waste management risks to earth



N95, 3 Ply, Surgical masks all will create minimum of 30,000 tonnes of non-biodegradable hazardous land and water waste which will be produced just in this year.



Employment generation  
for  
Underprivileged women



Employment generation  
for  
Differently abled



Employment generation  
for  
Jail Prisoners

# Social Impact



# Economical Impact



## Micro level impact



Weekly usage cost comparison

Note: Kawach lasts 80 hours while N95 lasts 10 hours (max). You should NEVER wash and reuse any bonded mask with filter including N95 (it decreases the filtration capacity of the mask, defeating it's purpose)

# Economical Impact



## Macro level impact



Lesser Covid 19 cases



Less hazardous waste



Job Creation

# Technical Comparison Sheet

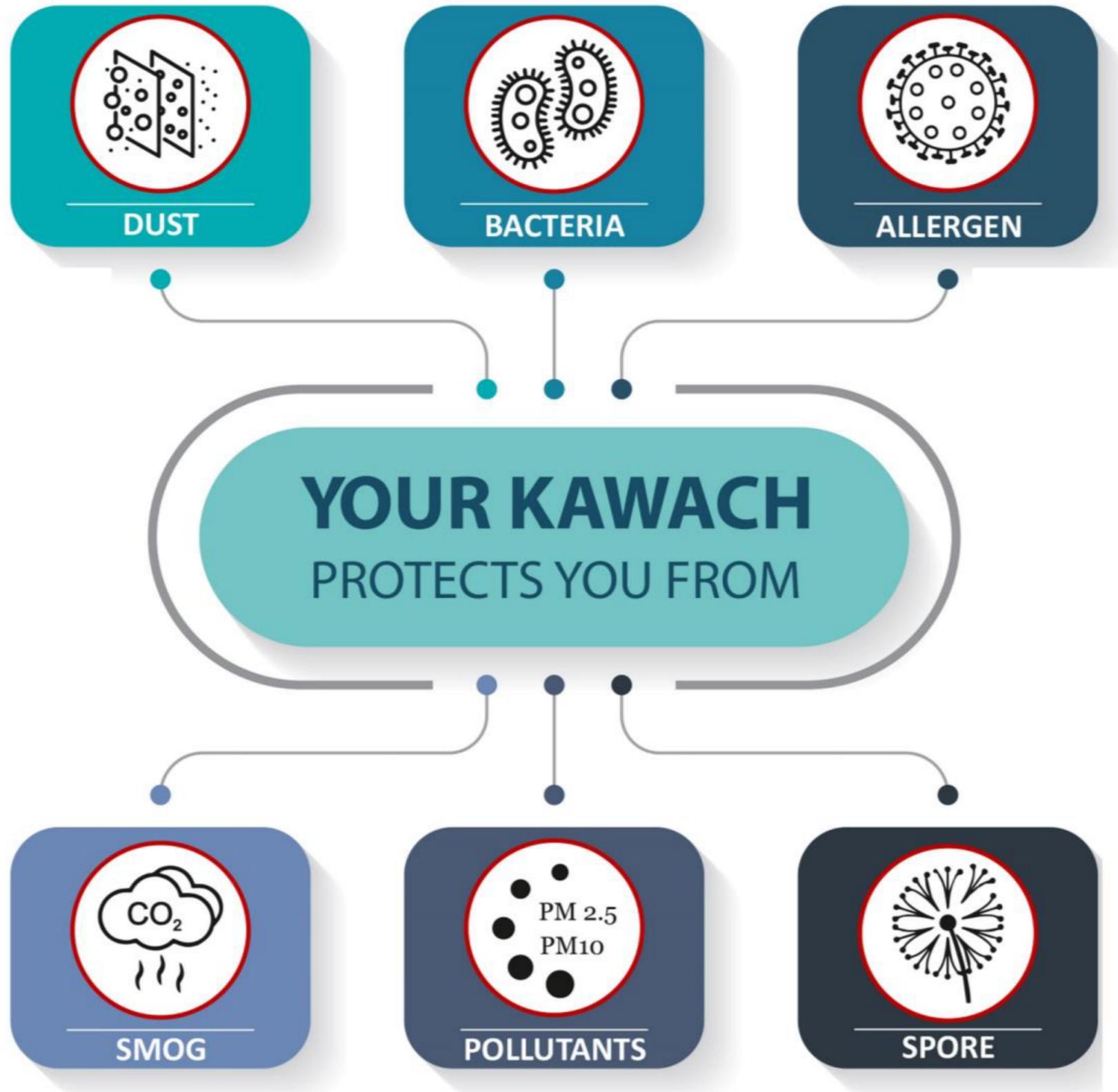
				
CRITERIA	KAWACH	N95	SURGICAL MASK	CLOTH MASK
Filtration Efficiency (PM 3)	98%	>95%	>90%	>25%
Filtration (PM0.3)	90%	95%	>80%	>10%
Secure Fitting (Prevents infiltration)				
Breathability	Good	Hard	Good	Moderate

# Technical Comparison Sheet

				
CRITERIA	KAWACH	N95	SURGICAL MASK	CLOTH MASK
Splash Resistance (160 mm Hg)	✓	✓	✓	✗
Biodegradable	✓	✗	✗	✗
Usage	80 hours	8- 10 hours	8- 10 hours	Reusable but unsafe
Price (in Rs.)	45	100-700	5-20	50-100

Features	Kawach Standard	Kawach ELITE	Kawach PRO	Kawach INSPIRE
MRP (in INR)	45	75	75	75
Filter Protection (PM3)	99.90%	99.90%	99.90%	99.90%
Washable	Yes	Yes	Yes	Yes
Functionalities	NA	Anti-microbial	Water Repellant, Anti-dust	Anti-microbial
Nose pin	No	Yes	Yes	Yes
Head Loop	No	Yes	No	No
Ear Loop	Yes	No	Yes	Yes
Adjustable Head/Ear Loop	No	Yes	Yes	Yes
Protection Layers	5	5	5	6
Outer Layer fabric	Cotton	Handcrafted Premium Linen	Nano Finished	Fashiobale Pointelle Knit Mesh
Inner Layer	Knit Mesh	Anti-microbial Knit Mesh	Anti-microbial Knit Mesh	Anti-microbial Knit Mesh
Bio-degradable	Yes	Yes	Yes	Yes
Colors available	Sky Blue, Grey, Black	White	Blue	White, Black
Weight (g)	11	12	13	11
Size	Universal Fit	Universal Fit	Universal Fit	Universal Fit

# A Product of IIT Delhi Startup



M MERA  
A APNA  
S SURAKSHA  
K KAWACH



The Kawach has Multi layers. Layer-1 (inner layer) - ultra-soft cotton fibre, knit mesh, fine gauge bio-washed fabric for anti-allergic, comfortable and extra filtration, Layer-2 (middle filter layer) melt-blown/spun bond technology for ultra-high filtration greater than 99.9% at 3micron, Layer-3 (outer layer)- lightweight knit mesh for first layer protection from large particles and splash.

Materials are tested and verified as per ASTM Standards from the NABL Accredited Lab. Key Compliances includes FDA, CE, GMP & ISO from KBN Certification System.

- Washable & Reusable
- Multilayer Textile Protection
- 99.9% filter efficiency PM3
- 3D fit design
- Comfortable inner knit layer
- Adjustable & universal fit
- Lightweight
- Soft elastic Ear Loop
- Eco Friendly



### Why **KAWACH™**

	<b>KAWACH™</b>	N95	Surgical	3 Ply
<b>Filtration (3 μm)</b>	98%	>95%	>90%	<25%
<b>Filtration (0.3 μm)</b>	90%	95%	>80%	<10%
<b>Price (INR)</b>	45	100-700	5-20	50-100
<b>Fit</b>	Secure	Secure	Loose	Loose
<b>ΔP, Pa/cm<sup>2</sup></b>	<30	>60	>60	<50
<b>Splash (160 mmHg)</b>	Pass	Pass	Pass	Fail
<b>Biodegradability</b>	Yes	No	No	No
<b>Weight (g)</b>	13-15	<30	<15	<30





# THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION

**CENTRE OF EXCELLENCE FOR MEDICAL TEXTILES**  
**Physical, Chemical & Biological Testing Laboratories**

(ISO/IEC 17025 NABL ACCREDITED)

13/37, Avinashi Road, Aerodrome Post, Coimbatore - 641 014, INDIA



Cert. Number:TC-6944

Etex Health Care Private Limited, Ref : 8.4.2020

ULR: TC69442060000799P

(Sample Tested at : R.H.65% +/- 2% and Temp. 21 Degree C +/- 1 Degree C)

<b>Differential Pressure**</b> <b>IS 16289:2014 Annex C</b> Pa/cm <sup>2</sup>	<b>P2000451-1</b> Described by the Customer : <b>Facw Mask sample 20 Nos.</b> 28.0
<b>Particulate Filtration Efficiency at 0.3 Microns</b> <b>ASTM F2299/F2299M-03 (2010)</b> Percentage	<b>P2000451-1</b> Described by the Customer : <b>Facw Mask sample 20 Nos.</b> 89.77
<b>Splash Resistance</b> <b>ASTM F1862/F1862M-13</b> Result at 160mmHg	<b>P2000451-1</b> Described by the Customer : <b>Facw Mask sample 20 Nos.</b> Pass



## THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION SITRA CHEMICAL LABORATORY

13/37 Avinashi Road, Aerodrome Post, Coimbatore - 641 014, INDIA  
Ph : (0422) 2574367-9, 4215334, 4215328 Fax : (0422) 2571896, 4215300  
Email: chem@sitra.org.in, info@sitra.org.in Website: http:// www.sitra.org.in  
Address all correspondence to the Director

Test Report No : N2000012

Report Date : 20-04-2020

Etex Health Care Private Limited

Ref : DT:20.04.2020

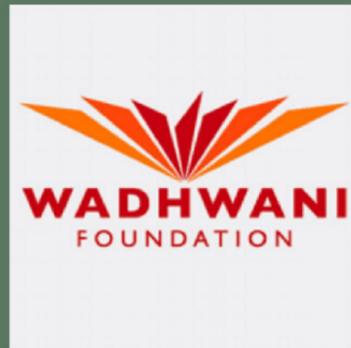
<b>Flammability</b> <b>16 CFR Part-1610</b>	<b>N2000012-1</b> <b>Sample Particulars : Face Mask</b>
Flammability in seconds	51.5
Auto Flame Chamber, 45deg inclined	.
Classification	Class 1

- End of Report -

# SITRA Approved

Kawach is SITRA approved

# OUR SUPPORTERS



# KAWACH IN MEDIA



MEDIA COVERAGE IN 170+ MEDIA CHANNELS