

# WHAT IS A PPE KIT?

- PPE (Personal Protective Equipment) is a set of garments which acts as a barrier between the person wearing it and infection-spreading viruses and other pathogens.
- PPE Kit covers the whole body including the eyes and the mouth and closes any possible passage for the pathogen to enter the body.



## PPE KIT-COMPONENTS

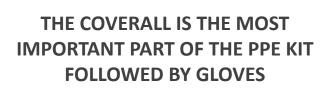
### An Ideal PPE comprises of:

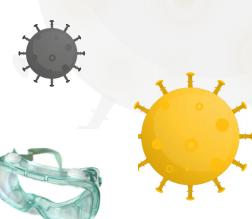
- ☐ Protective Coveralls
- ☐Shoe covers
- **□**Gloves
- □Surgical N95 Respirators
- ☐Goggles or Face shields
- ☐Bio Hazard bag



















DIRECTORATE GENERAL OF HEALTH SERVICES (IN ACCORDANCE WITH WHO GUIDELINES)



# Recommendations: Directorate General of Health Services

#### IN ACCORDANCE WITH WHO GUIDELINES

S No	Components	Mandatory Requirements	
1	Face Shield	<ul> <li>Made of clear plastic and provides good visibility to both the wearer and the patient</li> <li>Adjustable band to attach firmly around the head and fit snuggly against the forehead</li> <li>Fog resistant (preferable)</li> <li>Completely covers the sides and length of the face</li> <li>May be re-usable (made of material which can be cleaned and disinfected) or disposable</li> <li>Quality compliant with the below standards, or equivalent:</li> <li>a. EU standard directive 86/686/EEC, EN 166/2002.</li> </ul>	b. ANSI/SEA Z87.1-2010
2	Goggles	<ul> <li>With transparent glasses, zero power, well fitting, covered from all sides with elastic band/or active of the face</li> <li>Flexible frame to easily fit all face contours without too much pressure</li> <li>Covers the eyes and the surrounding areas and accommodates for prescription glasses</li> <li>Fog and scratch resistant</li> <li>Adjustable band to secure firmly so as not to become loose during clinical activity</li> <li>Indirect venting to reduce fogging</li> <li>May be re-usable (provided appropriate arrangements for decontamination are in place) or distinguish of the provided directive 86/686/EEC, EN 166/2002</li> <li>ANSI/SEA Z87.1-2010</li> </ul>	

PRODUCTS. INSIGHTS. RESEARCH

# Recommendations: Directorate General of Health Services

IN ACCORDANCE WITH	WHO GUIDELINES
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S No	Components	Mandatory Requirements
3	Masks	
a)	Triple layer surgical mask	• Three layered medical mask of non-woven material with nose piece, having filter efficiency of 99% for 3 micron particle size. a. ISI specifications orequivalent
b)	N-95 Respirator mask	<ul> <li>Shape that will not collapse easily</li> <li>High filtration efficiency</li> <li>Good breathability, with expiratory valve</li> <li>Quality compliant with standards for medical N95 respirator:</li> <li>a. NIOSH N95,EN149 FFP2,or equivalent</li> <li>Fluid resistance: minimum 80 mmHg pressure based on ASTM F1862, ISO 22609, or equivalent</li> <li>Quality compliant with standards for particulate respirator that can be worn with full-face shield</li> </ul>
4	Gloves	<ul> <li>Nitrile</li> <li>Non-sterile</li> <li>Powder free</li> <li>Outer gloves preferably reach mid-forearm (minimum 280 mm total length)</li> <li>Different sizes (6.5 &amp;7)</li> <li>Quality compliant with the below standards, or equivalent: EU standard directive 93/42/EEC Class I, EN 455 EU standard directive 89/686/EEC Category Ill, EN 374 ANSI/SEA 105-2011</li> </ul>

ASTM D6319-10

# Recommendations: Directorate General of Health Services

IN ACCORDANCE WITH WHO GUIDELINES	IN	ACCOR	DANCE	WITH WI	HO GUIDI	LINES
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<ul> <li>Impermeable to blood and body fluid/Fluid Resistant</li> <li>Single use</li> <li>Avoid culturally unacceptable colors e.g. black</li> <li>Coverall/Gowns</li> <li>Light colors are preferable to better detect possible contamination</li> </ul>	1
<ul> <li>Thumb/finger loops to anchor sleeves in place</li> <li>Quality compliant with following standard</li> <li>a. Whets or exceeds ISO 16603 class 3 exposure pressure, or equivalent</li> </ul>	
<ul> <li>Shoe covers</li> <li>Made up of the same fabric as of coverall</li> <li>Should cover the entire shoe and reach above ankles</li> </ul>	
<ul> <li>Head covers</li> <li>Coveralls usually cover the head. Those using gowns, should use a head cover that covers the head and neck providing clinical care for patients. Hair and hair extensions should fit inside the head cover.</li> </ul>	while





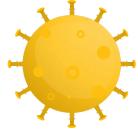


DIRECTORATE GENERAL OF HEALTH SERVICES (IN ACCORDANCE WITH WHO GUIDELINES)





# IN ACCORDANCE WITH MINISTRY OF HEALTH AND FAMILY WELFARE & MINISTRY OF TEXTILES GOVERNMENT OF INDIA (MEMORANDUM DATED $6^{\text{TH}}$ APRIL, $16^{\text{TH}}$ APRIL AND $22^{\text{ND}}$ APRIL)



Some instances have come to the notice of this Ministry, where Manufacturers / Suppliers whose proto-type samples for Body Coveralls for COVID-19 have failed laboratory tests, are still supplying their Personal Protection Equipment (PPE)

As of now, there are two laboratories in the country which have the facilities as well as necessary approvals, for conducting \_tests on Body Coveralls (PPE) required for COVID-19. These are; South India Textiles Research Association (SITRA), Coimbatore; and Defence Research & Development Establishment (DRDE), Gwalior.

For each test conducted at SITRA in respect of a fabric and the PPE garments, for which proto-type samples are sent by the respective manufacturers, SITRA will generate a Unique Certification Code (UCC-COVID 19).

The PPE Garment (Body Coveralls for COVID-19) manufacturer will manufacture Coveralls in accordance with the materials and workmanship as per the tested and certified prototype sample, wn.ich is linked

with the UCC-COVID 19.

Body Coveralls in the market.

The PPE (Body Coverall for COVID-19) garment manufacturer will either print in indelible ink, or stick a tamper-proof sticker, on the body of the garment on the inside of the PPE with the following particulars;

- (i) Name of Manufacturer:
- (ii) SITRA /DRDE Unique Certification Code (UCC)
- (iii)Test Standard
  - (iv) Date of Manufacturing / Batch Number

Samples of Protective coveralls along with the shoe cover has to be sent to South India Textile Research Association (SITRA)/DRDO/OFB for testing and certification, as per specifications and it has to be SITRA/DRDO/OFB approved with a Unique Certification Code- DGHS-GOVT OF INDIA







THE GROUP

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Our Businesses > Manufacturing

#### GARMENTING AT BENGALURU (KARNATAKA)

Silver Spark Apparel Ltd. & Celebrations Apparel Limited are wholly owned subsidiaries of Raymond marking its foray in the international apparel outsourcing market. These entities are largest manufacturers of high end Suits, Jackets, Trousers & Shirts, exported to leading international markets such as USA, EU and Japan. Silver Spark Apparel Ltd is the only Indian manufacturer with an expertise to craft Full Canvas Suits.







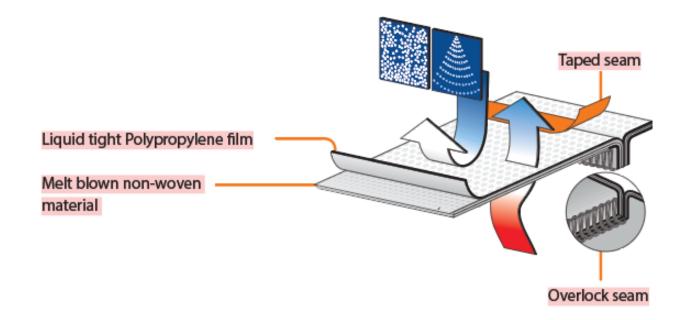
# **AEGIS-THE PRODUCT**

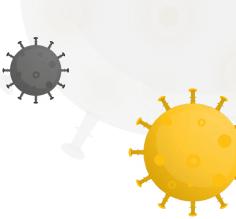
HOW AND WHY IT STANDS OUT AS "THE RIGHT PROTECTION".



# Aegis: Dual Lamination & Taped Seam

The extremely light and tight spunbond-polypropylene-dual lamination provides an effective barrier against viruses and other pathogens. The mechanical strength of the material and the sealed, taped seams allow the AEGIS Coverall to provide protection against the highest strains without reducing comfort.







# **Aegis: Approvals**

- □SITRA approved for complete suit including fabric, garment, seam and shoe cover.
- ☐ In compliance with ISO 16603 standards
- ☐ ASTM F1670/F1670-08 Tested



MANDATORY AS PER GOVT OF INDIA





# **Aegis: The Label Guidelines**



Name of Manufacture: Silver spark Apparel Ltd

SITRA Unique identification code:

S-NW-CA200406P0053-A5B1

Test Standard: ASTM F 1670/F 1670M-08(2014)

Date of Manufacturing: 04/2020

Marketed by

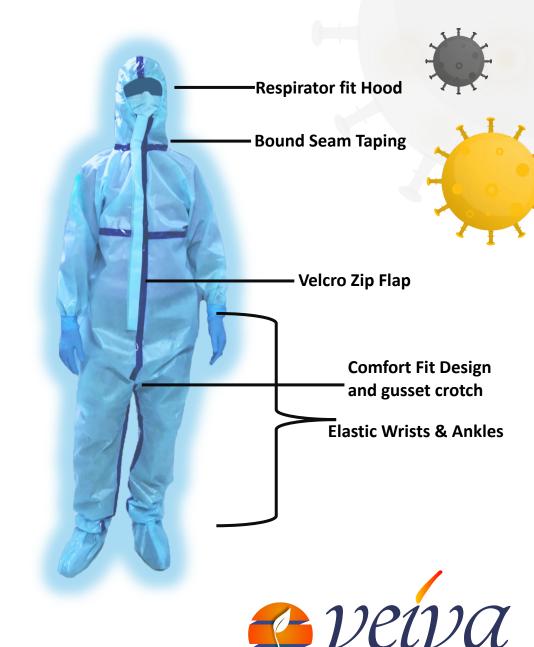
Veiva Scientific India Pvt Ltd





# **Aegis: Key Features**

SITRA approved for complete coverall including fabric, garments, seam and shoe cover-as per government quidelines. ☐ In compliance with ISO 16603 standards. ☐ Bound seam taping from Zipper, comes with lock slider, covered with storm flap with provision of self-adhesive sealing. ■ Non-woven Poly Propylene Laminated light fabric. ☐ Fabric and Seam both impermeable to blood and fluids. ☐ Fluid Resistant from both inner and outer surface. High breathability, ideal for high and humid temperature zones. ☐ Ethylene Oxide Sterilised ☐ ASTM F1670/F1670-08 Tested



# **AEGIS: KIT**

- **❖ AEGIS PROTECTIVE COVERALL with SHOE COVER** <
- **❖ NITRILE GLOVES**
- **❖ BIO-HAZARD WASTE BAG**
- **❖ THREE PLY MASK**









GOGGLES







