



**national treasury**

Department:  
National Treasury  
REPUBLIC OF SOUTH AFRICA

Private Bag X115, Pretoria, 0001

TO: ACCOUNTING OFFICERS OF ALL NATIONAL DEPARTMENTS AND  
CONSTITUTIONAL INSTITUTIONS

ACCOUNTING AUTHORITIES OF ALL SCHEDULE 2 AND 3 PUBLIC ENTITIES

HEAD OFFICIALS OF PROVINCIAL TREASURIES

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:**

**EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

**1. PURPOSE**

The purpose of this Instruction is to-

***General***

- 1.1 prescribe emergency procurement procedures to deal with the COVID-19 pandemic, which was declared a national state of disaster (the Disaster) on 15 March 2020;
- 1.2 avoid the abuse of the supply chain management (SCM) system to deal with the Disaster;

***Specific***

- 1.3 prescribe emergency procurement procedures of Covid-19 PPE items and cloth masks for ease of supply by small, medium and micro enterprises (SMMEs) and create an environment for stimulation of local supply and manufacturing; and
- 1.4 set the maximum prices to be paid by institutions for selected COVID-19 PPE items and cloth masks.

**2. BACKGROUND**

- 2.1 On 15 March 2020, President Cyril Ramaphosa announced the declaration of a national state of disaster following the World Health Organisation declaring the COVID-19 outbreak as a pandemic as well as measures that must be implemented in South Africa.
- 2.2 On 18 March 2020, regulations under the Disaster Management Act, 2002, regarding steps to prevent an escalation of the disaster or to alleviate, contain and minimise the effects of the Disaster were gazetted in Government Notice No. 318 of 18 March 2020, as amended and substituted from time to time (the DMA Regulations).
- 2.3 Regulation 9 of the DMA Regulations provides that emergency procurement for institutions is subject to-

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

- (a) the Public Finance Management Act, 1999 (Act No. 1 of 1999), and the applicable emergency provisions in the Regulations or Instructions made under section 76 of that Act; and
  - (b) the Municipal Finance Management Act, 2003 (Act No. 56 of 2003), and the applicable emergency provisions in the Regulations made under that Act.
- 2.4 In light of the above, the general and specific instructions and applicable procedures are described below.

**3. GENERAL EMERGENCY PROCUREMENT INSTRUCTIONS**

- 3.1 Accounting officers and accounting authorities must put in place the following additional procurement and expenditure measures to address the programme of preventing the spread of the COVID-19 virus:
- (a) internal system for financial control, risk management and reporting in order to account for the funds used for the COVID-19 disaster;
  - (b) ensure that officials committing any expenditure are duly authorised or properly delegated;
  - (c) avail internal audit functions to conduct audit checks in order to pick up and prevent irregularities pro-actively;
  - (d) regular monitoring of expenditure and generate frequent expenditure reports (at least weekly) including monitoring any risks that may arise.
- 3.2 National Treasury SCM Instruction Note 3 of 2016/17 – Preventing and Combating Abuse in the Supply Chain Management System, paragraph 8.1, states that accounting officers/accounting authorities must only deviate from inviting competitive bids in cases of emergency and sole supplier status. These deviations do not require the approval of the relevant treasury approval. Paragraph 8.2 thereof further states that emergency procurement may occur when there is a serious and unexpected situation that poses an immediate risk to health, life, property or environment which calls an agency to action and there is insufficient time to invite competitive bids.
- 3.3 The Covid-19 pandemic is a situation that justifies the use of emergency procurement provisions.
- 3.4 The emergency procurement provisions provide for accounting officers/authorities to procure the required goods or services by other means, such as price quotations or negotiations in accordance with Treasury Regulation 16A6.4. The reasons should be recorded and approved by the accounting officer/Authority or his / her delegate.
- 3.5 National Treasury Practice Note No. 8 of 2007/08, paragraph 3.4.3, requires accounting officers and accounting authorities to report within 10 working days to the relevant

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

treasury and the Auditor-General all cases where goods and services above the value of R1 million (VAT inclusive) were procured in terms of Treasury Regulation 16A6.4. The report must include the description of the goods or services, the name/s of the supplier/s, the amount/s involved and the reasons for dispensing with the prescribed competitive bidding process.

- 3.6 In terms of paragraph 9.1 of the National Treasury SCM Instruction No. 3 of 2016/17 - Preventing and Combating Abuse in the Supply Chain Management System, accounting officers and accounting authorities may, under normal circumstances, vary/expand contracts up to 20% or R20 million (including VAT) for construction-related goods, works or services and up to 15% or R15 million for all other goods and services of the original contract value without treasury approval. For this Instruction and the period until the COVID-19 pandemic is declared over, the thresholds are increased to 30% or R30 million for construction-related goods, works or services and 25% or R25 million of the original contract value if the variation is for goods, works or services to prevent an escalation of the Disaster or to alleviate, contain or minimise the effects of the Disaster.
- 3.7 Any contract variation, extension and or expansion in excess of these revised thresholds will only be allowed in exceptional cases subject to prior written approval of the relevant treasury.

**4. EMERGENCY PROCUREMENT INSTRUCTIONS OF PPE ITEMS AND CLOTH MASKS**

- 4.1 National Treasury has provided the specifications and maximum prices the institutions must use to procure the basic preventative PPE items and cloth masks to contain and manage the transmission of the COVID-19 virus.
- 4.2 National Treasury has set the maximum prices for the identified PPE items and cloth masks to reflect realistic current market prices.
- 4.3 The list of PPE items and cloth masks with their maximum prices are attached as **Annexure A** that may be updated from time to time.
- 4.4 During the duration of the national state of disaster, the supply of the PPE items will be open to all suppliers that conform to the COVID-19 item specifications as issued by the World Health Organisation (WHO) and the National Department of Health (NDOH).
- 4.5 The specification for the cloth masks is determined by the Department of Trade, Industry and Competition (DTIC) and the National Department of Health (NDoH) and is attached as **Annexure B**.
- 4.6 Institutions may approach any supplier to obtain quotes and may procure from such suppliers on condition that-

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

- (a) the items are to the specifications as determined by the WHO and NDOH;
  - (b) the prices are equal or lower than the prices in **Annexure A**; and
  - (c) the supplier is registered in the Central Supplier Database and any other database as may be approved by National Treasury.
  - (d) For the cloth masks, only suppliers that are registered with the Department of Small Business Development and are registered on CSD will be considered. The details of these suppliers will be updated and published on the National Treasury Website on weekly basis.
- 4.7 Institutions are encouraged to use small enterprises that fall under the designated group in terms of the Preferential Procurement Regulations, 2017.
- 4.8 Where an institution or a provincial treasury already have a contract(s) in place for the items listed in Annexure A, the institution must honour the contract and continue to procure from that contract. Institutions must not pay prices in excess of the prices provided in Annexure A.
- 4.9 If prices are higher than those provided on Annexure A, a price variance of up to 10% of prices on Annexure A will be allowed. Any deviation to this provision must be approved by the accounting officer or accounting authority or delegated person based on a justifiable reason.
- 4.10 If any of the items listed in Annexure A is provided for in existing Facilities Management Contracts, institutions may negotiate with the Facilities Management Service Provider to provide the items. Contracts may be expanded or varied (refer paragraph 3.6 above), but only for items to prevent an escalation of the Disaster or to alleviate, contain or minimise the effects of the Disaster. Institutions may not pay prices in excess of the prices provided for in Annexure A except as provided for in paragraph 4.9.
- 5. USE OF TRANSVERSAL CONTRACTS**
- 5.1 Institutions that are already participants in transversal contracts may continue placing orders as usual and may opt to use any other supplier.
- 5.2 The accounting officer or accounting authority may procure the listed PPE items on Annexure A without obtaining participation approval from the National Treasury Transversal Contracting Unit.
- 5.3 The transversal contract suppliers' prices will default to Annexure A prices and may vary as provided for in paragraph 4.9.

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

**6. IMPACT ON OTHER PROCUREMENT PROCESSES**

**6.1 TENDER BRIEFING SESSIONS**

- 6.1.1 Procurement is essential in preventing the spread of the virus and some processes within the procurement process are prone to interact with various stakeholders, such as tender briefing sessions and public tender opening.
- 6.1.2 To ensure that service delivery is not negatively impacted and to complement the measures announced by the President, National Treasury advises that institutions must, as far as possible, avoid convening briefing sessions.
- 6.1.3 Briefing sessions should not be made compulsory or mandatory unless otherwise approved by the accounting officer or accounting authority.
- 6.1.4 Bidders may be requested to send electronic mails for any enquiries related to the bid. The institution must specify the period within which the e-mail enquiries must be sent. The institution must respond to all enquiries related to the bid at least a week before the closing date of the bid. A schedule of the questions and answers must be uploaded on the institution's website and or any other measure to ensure that all bidders receive the information.
- 6.1.5 Institutions may extend the response period for bids beyond the required 21 days to accommodate the enquiry process, but not more than 40 days.
- 6.1.6 Where briefing session cannot be avoided and to the extent permitted by the DMA Regulations, the session must be arranged by other means such as podcasting, teleconferencing, Microsoft Teams, Zoom, and similar enablers as well as combination of any of these enablers and face-face meetings.
- 6.1.7 In the case of bids that have already been advertised with a determined briefing date, the bid closing date and briefing session date may be extended to accommodate the logistical arrangements to effect the necessary health requirements as published. The revised dates must be republished on the eTender publication portal and the organ of state's website where possible. However, bidders who have submitted their bids already may not submit new bids as a result of the extensions.
- 6.1.8 Institutions must ensure that, in respect of all procurement activities, all precautionary measures issued by the Department of Health and other relevant authorities are strictly observed to prevent the spread of the COVID-19 virus.



**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

**6.2 PUBLIC OPENING OF TENDERS**

Where there is a public bid opening, the institution must comply with the regulations made under the Disaster Management Act, 2002, published in the *Gazette* on 18 March 2020.

**7. REPORTING REQUIREMENT**

7.1 Institutions must amend their procurement plans to reflect their planned COVID-19 related procurement and available budget.

**8. APPLICABILITY**

This Instruction applies to all national and provincial departments, constitutional institutions and public entities listed in Schedules 2 and 3 to the Public Finance Management Act, 1999.

**9. REPEAL OF NATIONAL TREASURY INSTRUCTION NO. 03 OF 2020/21**

9.1 National Treasury Instruction No. 03 of 2020/2021: Covid-19 Disaster Management Central Emergency Procurement Strategy for PFMA Organs of State, is hereby repealed.

9.2 Communication will be sent to Institutions that have already placed orders in terms of instructon Note 3 of 2020/21.

**10. DISSEMINATION OF INFORMATION CONTAINED IN INSTRUCTION**

10.1 Heads of provincial treasuries are requested to bring the contents of this Instruction to the attention of accounting officers and supply chain management officials of their respective provincial departments.

10.2 Accounting officers of national and provincial departments are requested to bring the contents of this Instruction to the attention of accounting authorities and the supply chain management officials of Schedule 3A and 3C public entities reporting to their respective executive authorities.

10.3 Accounting authorities of Schedule 2, 3B and 3D public entities are requested to bring the contents of this Instruction to the attention of the supply chain management officials of their public entities.

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

---

**11. NOTIFICATION TO THE AUDITOR-GENERAL**

A copy of this Instruction will be submitted to the Auditor-General for notification.

**12. AUTHORITY FOR THIS CIRCULAR AND EFFECTIVE DATE**

12.1 This Instruction is issued in terms of section 76(4)(c) and (g) of the Public Finance Management Act, 1999 and takes effect from the date of issue.

12.2 This Instruction will be in effect until the national state of disaster, declared on 15 March 2020, lapses or terminates or until this Instruction is withdrawn.

**13. CONTACT INFORMATION**

**Any enquiries in respect of this instruction must be submitted to:**

Mr Molefe Fani  
Chief Director: Transversal Contracting  
Tel: (012) 395 6741  
EMAIL: [Molefe.Fani@treasury.gov.za](mailto:Molefe.Fani@treasury.gov.za)

Or

Estelle Setan  
Acting Chief Procurement Officer  
EMAIL: [cpo@treasury.gov.za](mailto:cpo@treasury.gov.za)



**DONDO MOGAJANE**  
**DIRECTOR-GENERAL: NATIONAL TREASURY**  
Date: 28 April 2020

**Attachments:**

**Annexure A: Covid-19 Personal Protective Equipment Price List (as at 28 April 2020)**

**Annexure B: Recommended Guidelines – updated. Fabric Face Masks Manufactured by South Africa's Clothing and Textile Manufacturing Industry for General Public Use**

## ANNEXURE A

### COVID-19 PERSONAL PROTECTIVE EQUIPMENT PRICE LIST

Prices as at: <b>28 April 2020</b>					
Product	Product description	WHO standards / description	Pack size	Unit Price per single item (Incl. VAT)	Price per Unit of Measure (Incl. VAT)
Surgical Mask - Patient	Mask, face, aseptic: Fluid Resistant, Molded, Blue (3 PLY), good breathability, internal and external faces should be clearly identified <b>Type I</b> , with ear loops or tie on	<ul style="list-style-type: none"> <li>EN 14683 any type including Type I</li> <li>ASTM F2100 minimum level 1 or equivalent</li> </ul>	Box of 50 pieces	R10,22 per mask	R511,00 per box of 50 pieces
Surgical Mask - Health Care Worker	Mask, face, aseptic: Fluid Resistant, Molded, Blue (3 PLY), good breathability, internal and external faces should be clearly identified <b>Type II or higher</b> , with ear loops or tie on	<ul style="list-style-type: none"> <li>EU MDD Directive 93/42/EEC Category III or equivalent</li> <li>EN 14683 Type II, IR, IIIR</li> <li>ASTM F2100 minimum level 1 or equivalent</li> </ul>	Box of 50 pieces	R12,48 per mask	R624,00 per box of 50 pieces
Mask Respirator	N95 or FFP2 - Mask Respirator / Dust Mask, or higher. Good breathability with design that does not collapse against the mouth (e.g. duckbill, cup-shaped)	<ul style="list-style-type: none"> <li>Minimum "N95" respirator according to FDA Class II, under 21 CFR 878.4040, and CDC NIOSH, or</li> <li>Minimum "FFP2 according to EN149, EU PPE Regulation 2016/425 Category III, or equivalent</li> </ul>	Box of 10 Pieces	R37,80 per mask	R378,00 per box of 10 pieces

Only Health departments may procure this item

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

<p>Apron</p>	<p>Straight apron with bib, Fabric: 100% polyester with PVC coating, or 100% PVC, or 100% rubber, or other fluid resistant coated material. Waterproof, sewn strap for neck and back fastening. Minimum basis weight: 300 g/m2, Covering size: 70 - 90 cm (width) x 120 - 150 cm (height). Reusable (provided appropriate arrangements for decontamination are in place)</p>	<ul style="list-style-type: none"> <li>▪ EN ISO 13688</li> <li>▪ EN 14126-B and partial protection (EN 13034 or EN 14605)</li> <li>▪ EN 343 for water and breathability or equivalent</li> </ul>	<p>Box of 100 Pieces</p>	<p>R2,97 per Apron</p> <p>R297,00 per box of 100 Apron</p>
<p>Eye Protection</p>	<p>Goggles Good seal with the skin of the face, flexible PVC frame to easily fit with all face contours with even pressure, enclose eyes and the surrounding areas, accommodate wearers with prescription glasses, clear plastic lens with fog and scratch resistant treatments, adjustable band to secure firmly so as not to become loose during clinical activity, indirect venting to avoid fogging. May be re-usable (provided appropriate arrangements for decontamination are in place) or disposable.</p>	<ul style="list-style-type: none"> <li>▪ EU PPE Regulation 2016/425</li> <li>▪ EN 166</li> <li>▪ ANSI/ISEA Z87.1 or equivalent</li> </ul>	<p>Each</p>	<p>R100,44 per each</p> <p>R 100,44 per each</p>

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

<p>Visor / Face Shield</p>	<p>Made of clear plastic and providing good visibility to both the wearer and the patient. Adjustable band to attach firmly around the head and fit snugly against the forehead, fog resistant (preferable). Completely cover the sides and length of the face. May be reusable (made of robust material which can be cleaned and disinfected) or disposable.</p>	<ul style="list-style-type: none"> <li>▪ EU PPE Regulation 2016/425</li> <li>▪ EN 166</li> <li>▪ ANSI/ISEA Z87.1 or equivalent</li> </ul>	<p>Each</p>	<p>R108,00 per each</p>	<p>R108.00 per each</p>
<p>Gowns</p>	<p>Isolation gown Protective 3- layers of spunbond meltblown spunbond fabric( Top layer of spunbound polypropylene, a middle layer of meltdown polypropylene and a bottom layer of meltdown polypropylene for light fluid contact and contact Isolation, elastic cuff, Tape-tab neck closure, Tie waist, Non Sterile Dimensions: Large Length: (from shoulder to hem) 116cm Sleeve length: (from shoulder to wrist) 56cm Belt length: 167cm; Belt Width: 5cm; Belt place: (neck to top of belt) 38cm</p>	<ul style="list-style-type: none"> <li>▪ EU PPE Regulation 2016/425 and EU MIDD Directive 93/42/EE</li> <li>▪ FDA Class I or II medical device, or equivalent</li> <li>▪ EN 13795 any performance level, or</li> <li>▪ AAMI PB70 all levels acceptable, or equivalent</li> </ul>	<p>Each</p>	<p>R113,40 per each</p>	<p>R113,40 per each</p>

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

Gowns	Gown, surgical, non-woven polypropylene body+- 54g/m sleeves +- 66g/m. Long sleeves with cuffs. Reinforced in chest and forearm areas. Resistant to liquid penetration. Lint free, non flammable, Bacteria barrier efficiency, to comply with SANS 53795, Compliance certificate to be submitted, Sterile, individual double peel packed	<ul style="list-style-type: none"> <li>▪ EU PPE Regulation 2016/425 and EU MDD Directive 93/42/EEC</li> <li>▪ FDA Class I or II medical device, or equivalent</li> <li>▪ EN 13795 any performance level, or</li> <li>▪ AAMI PB70 all levels acceptable, or equivalent</li> </ul>	Each	<p style="color: red;">Only Health departments may procure this item</p>	R135,00 per each
Coveralls	Protective cover bodysuits, disposable MEDIUM, LARGE, X-LARGE, XX-LARGE, 3X LARGE	<ul style="list-style-type: none"> <li>▪ Tunic/tops, woven, scrubs, reusable or single use, short sleeved (tunic/tops), worn underneath the coveralls or gown.</li> <li>▪ Trouser/pants, woven, scrubs, reusable or single use, worn underneath the coveralls or gown</li> </ul>	Each	R286,20 per coverall	R286,20 per coverall
Boot Covers	Overshoe, non-woven, single use. To be made from durable, water-repellent, opaque material Seam free under sole. Elasticated opening. Suitable for all size shoes		Box of 100 pieces	R1,30 per one boot cover	R130,00 per box of 100 pieces
Digital Thermometer	Digital Body Thermometer INFRARED NON CONTACT		Each	R2527,20 per each	R2527,20 per each

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

Sanitisers and Disinfectants	Sanitizer, with not less than 70% alcohol must comply to WHO-recommended handrub formulations		Litre	R183,60 per litre	R186,60 per litre
Biohazard bags	Bright red colour PP bags are easy to open and are used to dispose used Micro tips, Tubes and other plastic products.	Disposal bag for bio-hazardous waste, 30x50cm, with "Bio Hazard" print, autoclavable polypropylene. 50 or 70 micron thickness	Each	R1,30 each	R1,30 each
Body Bags	Manufactured from 280 micron reinforced PVC, both ends are stitched and sealed to prevent any leakage, There must be 3 handles on each side with a full length curved zip, all handles must be box stitched using Polycotton Corespun Polished 36 Tex thread, and box stitching dimensions are all 4cm x 3cm. The dimensions are as follows: Length: 2.4 METERS Width: 1 METER, Zip: 1.8 METERS, Sizes:(Child, Small, Medium, Large, Extra-large)		Each	R210,60 per bag	R210,60 per bag

**NATIONAL TREASURY INSTRUCTION NO. 05 OF 2020/21:  
EMERGENCY PROCUREMENT IN RESPONSE TO NATIONAL STATE OF DISASTER**

Examination Gloves, non-sterile	Gloves, examination, nitrile, powder-free, non-sterile, single-use. Gloves should have long cuffs, reaching well above the wrist, ideally to mid-forearm. Sizes: small, medium, large.	<ul style="list-style-type: none"> <li>• EU MDD Directive 93/42/EEC Category III</li> <li>• EU PPE Regulation 2016/425 Category III</li> <li>• EN 455</li> <li>• EN 374</li> <li>• ANSI/ISEA 105,</li> <li>• ASTM D6319, or equivalent</li> </ul>	Box of 100 gloves	R0,46 per single glove	R46,44 per box of 100 pieces
Gloves, examination or surgical, sterile	Gloves - surgical or examination - nitrile, powder-free, sterile, single-use. Gloves should have long cuffs, reaching well above the wrist, ideally to mid-forearm. Sizes: small, medium, large.	<ul style="list-style-type: none"> <li>• EU MDD Directive 93/42/EEC Category III,</li> <li>• EU PPE Regulation 2016/425 Category III,</li> <li>• EN 455,</li> <li>• ANSI/ISEA 105,</li> <li>• ASTM D6319 or equivalent</li> </ul>	Box of 100 gloves	R5,78 per single glove	R577,37 per box of 100 pieces
Cloth Mask	Mask - 2 layers of fabric (As per the DTIC guidelines & Specifications) Mask - 3 layers of fabric (As per the DTIC guidelines & Specifications)		Each	R20,00 per each	R20,00 per each R25,00 per each



**ANNEXURE A**

**COVID-19 PERSONAL PROTECTIVE EQUIPMENT PRICE LIST**

Prices as at:

**28 April 2020**

Product	Product description	WHO standards / description	Pack size		Unit Price per single item (Incl. VAT)	Price per Unit of Measure (Incl. VAT)
Surgical Mask - Patient	Mask, face, aseptic: Fluid Resistant, Molded, Blue (3 PLY), good breathability, internal and external faces should be clearly identified <b>Type I</b> , with ear loops or tie on	- EN 14683 any type including Type I - ASTM F2100 minimum level 1 or equivalent	Box of 50 pieces		R10,22 per mask	R511,00 per box of 50 pieces
Surgical Mask - Health Care Worker	Mask, face, aseptic: Fluid Resistant, Molded, Blue (3 PLY), good breathability, internal and external faces should be clearly identified <b>Type II or higher</b> , with ear loops or tie on	- EU MDD Directive 93/42/EEC Category III or equivalent - EN 14683 Type II, IR, IIR - ASTM F2100 minimum level 1 or equivalent	Box of 50 pieces	Only Health departments may procure this item	R12,48 per mask	R624,00 per box of 50 pieces
Mask Respirator	N95 or FFP2 - Mask Respirator / Dust Mask, or higher. Good breathability with design that does not collapse against the mouth (e.g. duckbill, cup-shaped)	- Minimum "N95" respirator according to FDA Class II, under 21 CFR 878.4040, and CDC NIOSH, or - Minimum "FFP2" according to EN 149, EU PPE • Regulation 2016/425 Category III, or equivalent	Box of 10 Pieces		R37,80 per mask	R378,00 per box of 10 pieces
Apron	Straight apron with bib, Fabric: 100% polyester with PVC coating, or 100% PVC, or 100% rubber, or other fluid resistant coated material. Waterproof, sewn strap for neck and back fastening. Minimum basis weight: 300 g/m <sup>2</sup> , Covering size: 70-90 cm (width) x 120-150 cm (height). Reusable (provided appropriate arrangements for decontamination are in place)	• EN ISO 13688 • EN 14126-B and partial protection (EN 13034 or EN 14605) • EN 343 for water and breathability or equivalent	Box of 100 Pieces		R2,97 per Apron	R297,00 per box of 100 Apron
Eye Protection	Goggles Good seal with the skin of the face, flexible PVC frame to easily fit with all face contours with even pressure, enclose eyes and the surrounding areas, accommodate wearers with prescription glasses, clear plastic lens with fog and scratch resistant treatments, adjustable band to secure firmly so as not to become loose during clinical activity, indirect venting to avoid fogging. May be re-usable (provided appropriate arrangements for decontamination are in place) or disposable.	• EU PPE Regulation 2016/425 • EN 166 • ANSI/ISEA Z87.1 or equivalent	Each		R100,44 per each	R 100,44 per each
Visor / Face Shield	Made of clear plastic and providing good visibility to both the wearer and the patient. Adjustable band to attach firmly around the head and fit snugly against the forehead, fog resistant (preferable). Completely cover the sides and length of the face. May be re-usable (made of robust material which can be cleaned and disinfected) or disposable.	• EU PPE Regulation 2016/425 • EN 166 • ANSI/ISEA Z87.1 or equivalent	Each		R108,00 per each	R108,00 per each
Gowns	Isolation gown Protective 3- layers of spunbond meltblown spunbound fabric( Top layer of spunbound polypropylene, a middle layer of meltdown polypropylene and a bottom layer of meltdown polypropylene for light fluid contact and contact isolation, elastic cuff, Tape-tab neck closure, Tie waist, Non Sterile Dimensions: Large Length: (from shoulder to hem) 116cm Sleeve length: (from shoulder to wrist) 56cm Belt length: 167cm; Belt Width: 5cm; Belt place: (neck to top of belt) 38cm	• EU PPE Regulation 2016/425 and EU MDD Directive 93/42/EEC • FDA Class I or II medical device, or equivalent • EN 13795 any performance level, or • AAMI PB70 all levels acceptable, or equivalent	Each		R113,40 per each	R113,40 per each
Gowns	Gown, surgical, non-woven polypropylene body+ 54g/m sleeves + 66g/m. Long sleeves with cuffs. Reinforced in chest and forearm areas. Resistant to liquid penetration. Lint free, non flammable, Bacteria barrier efficiency, to comply with SANS 53795, Compliance certificate to be submitted, Sterile, individual double peel packed	• EU PPE Regulation 2016/425 and EU MDD Directive 93/42/EEC • FDA Class I or II medical device, or equivalent • EN 13795 any performance level, or • AAMI PB70 all levels acceptable, or equivalent	Each	Only Health departments may procure this item	R135,00 per each	R135,00 per each
Coveralls	Protective cover bodysuits, disposable MEDIUM, LARGE, X-LARGE, XX-LARGE, 3X LARGE	Tunic/tops, woven, scrubs, reusable or single use, short sleeved (tunic/tops), worn underneath the coveralls or gown. Trousers/pants, woven, scrubs, reusable or single use, worn underneath the coveralls or gown	Each		R286,20 per coverall	R286,20 per coverall
Boot Covers	Overshoe, non-woven, single use. To be made from durable, water-repellent, opaque material Seam free under sole. Elasticated opening. Suitable for all size shoes		Box of 100 pieces		R1,30 per one boot cover	R130,00 per box of 100 pieces
Digital Thermometer	Digital Body Thermometer INFRARED NON CONTACT		Each		R2527,20 per each	R2527,20 per each
Sanitisers and Disinfectants	Sanitizer, with not less than 70% alcohol must comply to WHO-recommended handrub formulations		Litre		R183,60 per litre	R186,60 per litre
Biohazard bags	Bright red colour PP bags are easy to open and are used to dispose used Micro tips, Tubes and other plastic products.	Disposal bag for bio-hazardous waste, 30x50cm, with "Bio Hazard" print, autoclavable polypropylene. 50 or 70 micron thickness	Each	Only Health departments may procure this item	R1,30 each	R1,30 each

Body Bags	Manufactured from 280 micron reinforced PVC, both ends are stitched and sealed to prevent any leakage. There must be 3 handles on each side with a full length curved zip, all handles must be box stitched using Polycotton Corespun Polished 36 Tex thread, and box stitching dimensions are all 4cm x 3cm. The dimensions are as follows: Length: 2.4 METERS Width: 1 METER, Zip: 1.8 METERS, Sizes:(Child, Small, Medium, Large, Extra-large)		Each	Only Health departments may procure this item	R210,60 per bag	R210,60 per bag
Examination Gloves, non-sterile	Gloves, examination, nitrile, powder-free, non-sterile, single-use. Gloves should have long cuffs, reaching well above the wrist, ideally to mid-forearm. Sizes: small, medium, large.	<ul style="list-style-type: none"> <li>• EU MDD Directive 93/42/EEC Category III</li> <li>• EU PPE Regulation 2016/425 Category III</li> <li>• EN 455</li> <li>• EN 374</li> <li>• ANSI/ISEA 105,</li> <li>• ASTM D6319, or equivalent</li> </ul>	Box of 100 gloves		R0,46 per single glove	R46,44 per box of 100 pieces
Gloves, examination or surgical, sterile	Gloves - surgical or examination - nitrile, powder-free, sterile, single-use. Gloves should have long cuffs, reaching well above the wrist, ideally to mid-forearm. Sizes: small, medium, large.	<ul style="list-style-type: none"> <li>• EU MDD Directive 93/42/EEC Category III,</li> <li>• EU PPE Regulation 2016/425 Category III,</li> <li>• EN 455,</li> <li>• ANSI/ISEA 105,</li> <li>• ASTM D6319 or equivalent</li> </ul>	Box of 100 gloves	Only Health departments may procure this item	R5,78 per single glove	R577,37 per box of 100 pieces
Cloth Mask	Mask - 2 layers of fabric (As per the DTIC guidelines & Specifications		Each		R20,00 per each	R20,00 per each
	Mask - 3 layers of fabric (As per the DTIC guidelines & Specifications		Each		R25,00 per each	R25,00 per each



trade, industry  
& competition

---

Department:  
Trade, Industry and Competition  
**REPUBLIC OF SOUTH AFRICA**

## **Recommended Guidelines – updated**

Fabric Face Masks

Manufactured by South Africa's

Clothing and Textile Manufacturing Industry for General Public Use

---

Friday, 24 April 2020

## Table of Contents

<b>1</b>	<b>OVERVIEW</b> .....	<b>3</b>
<b>2</b>	<b>SA’S LOCALISATION OBJECTIVES</b> .....	<b>4</b>
<b>3</b>	<b>BASIC PERFORMANCE REQUIREMENTS OF FABRIC/CLOTH FACE MASKS</b> .....	<b>5</b>
<b>4</b>	<b>FABRIC SELECTION FOR FABRIC MASKS</b> .....	<b>6</b>
4.1	GUIDELINES FOR FABRIC SELECTION .....	6
4.1.1	<i>Inner Layer (next to face)</i> .....	6
4.1.2	<i>Middle Layer (optional filter layer)</i> .....	7
4.1.3	<i>Outer Layer (faces outwards)</i> .....	7
4.1.4	<i>General Remarks</i> .....	8
<b>5</b>	<b>DESIGNS FOR FABRIC MASKS</b> .....	<b>8</b>
<b>6</b>	<b>INSTRUCTIONS FOR USING FABRIC MASKS</b> .....	<b>10</b>
<b>7</b>	<b>APPENDIX A: REFERENCE LIST OF LOCAL TEXTILE MANUFACTURERS</b> .....	<b>11</b>
7.1	MANUFACTURERS OF NONWOVEN TEXTILES .....	11
7.2	MANUFACTURERS OF WOVEN TEXTILES .....	14

# 1 Overview

A ‘fabric/cloth’ face mask (non-medical mask) for the general public is only part of a broader solution to curb the spread of COVID-19<sup>1</sup> and it must always be used in combination with other hygienic methods of prevention<sup>2</sup>. Such masks are not a replacement for other recommended precautionary measures. They should not provide a false sense of protection that lead to a lapse in the application of proper preventative measures like personal hand hygiene, respiratory hygiene and physical (social) distancing. Furthermore the design of fabric masks should be mindful of the thermo-physiological properties of fabrics which, if wrongly chosen, can lead to problems like skin irritation, the build-up of heat or moisture, or the incubation of bacteria etc, and may cause wearers to take off masks in situations when they should otherwise be wearing them. There has been much debate globally about the use of face masks for non-Health Care Professionals (non-HCP) during the Covid-19 pandemic. There is agreement in the recommendations that symptomatic individuals and those in healthcare settings should use face masks. But discrepancies and mixed messages exist in relation to the wearing of masks by the general public. By refining some of the lessons from various sources, it is possible to arrive at a set of interim guidelines for the use of masks by the general public in South Africa.

It is the intention of this document to distil these guidelines into a set of recommendations for the South African clothing and textile industry when making masks for use by the general public. These recommendations serve as suggested guidelines. They have been developed through engagements with publicly available research and recommendations from authorities like the World Health Organisation<sup>3</sup> (WHO) as well as through insights provided by colleagues from the University of Stellenbosch<sup>4</sup> (Dept of Chemistry and Polymer Science), University of Witwatersrand<sup>5</sup> (School of Public Health, Industry Specialists<sup>6</sup>, the Southern African Clothing Textile and Workers Union<sup>7</sup> (SACTWU), staff at the National Department of Health<sup>8</sup> and the Department of Trade, Industry, and Competition<sup>9</sup>.

1 <https://www.nicd.ac.za/diseases-a-z-index/covid-19/frequently-asked-questions/>

2 <https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-prevention/>

3 <https://www.who.int/>

4 Ms. Adine Gericke, Department of Chemistry and Polymer Science, University of Stellenbosch: <http://academic.sun.ac.za/polymer/agcv.html>

5 Dr. Moreshnee Govender, <https://www.wits.ac.za/staff/academic-a-z-listing/g/moreshneegovenderwitsacza/> : the School of Public Health, University of the Witwatersrand

6 Sma Ngcamu-Tukulula, Mr. Rob Stewart and Mr. Kyle Ballard.

7 [www.sactwu.org.za](http://www.sactwu.org.za)

8 <http://www.health.gov.za/>

9 <http://www.dti.gov.za/>

**Fabric or ‘cloth masks’ do not fall in the same category as surgical or medical masks.** Fabric/Cloth masks cannot prevent the risk of contracting the virus in aerosol form (as found in a contaminated atmosphere) since this requires the presence of very fine and highly specialised filters capable of trapping microscopic viral particles. **The shortage of medical grade masks globally and in South Africa means members of the public should not use these critical resources at the expense of frontline health workers.** In this context, and given that evidence indicates that the virus appears to largely exit through the mouth of an infected individual in droplet form (during talking, coughing or sneezing) it is believed that if the fabrics and filters used in the manufacture of cloth masks are chosen suitably and designed to fit users accordingly, these masks can play an important role in reducing the community transmission of the virus and offer some degree of protection for the user. They further appear to lower the risk of contracting the virus from contaminated surfaces by acting as a barrier to touching one’s face. The function of such public masks may be enhanced or impeded by the usability of the design and the combination of products, although it is also believed that any mask may be better than not wearing a mask.

## 2 SA’s Localisation Objectives

- ⇒ In line with the Republic of South Africa’s Industrial Policy Acton Plan<sup>10</sup> (IPAP) and the Clothing, Textile, Footwear and Leather (CTFL) Master Plan’s policy objectives it is highly recommended that manufacturers source textiles made locally, by local manufacturers, when making fabric/cloth face masks.
- ⇒ All textile/fabric quality recommendations for making fabric face masks, found within this document, are qualities found in textiles that are locally made in the Republic of South Africa.
- ⇒ It is imperative that fabric/cloth face mask manufacturers ensure that efforts to manufacturer masks are done within the boarder context of supporting South Africa’s Clothing and Textile Industry, and our government’s efforts to ensure localisation of value-chains and boarder economic prosperity – in keeping with our country’s developmental objectives and Industrial Policy.
- ⇒ A list of local textile manufacturers is found in the Appendix A of this document.

<sup>10</sup> [http://www.dti.gov.za/industrial\\_development/industrial\\_development.jsp](http://www.dti.gov.za/industrial_development/industrial_development.jsp)

### 3 Basic Performance Requirements of Fabric/Cloth Face Masks

- a) The performance of fabric/cloth face masks varies greatly with the shape and fit of the mask<sup>11</sup> as well as the fabric structural properties and number of layers.<sup>12</sup>
- b) The objective of a fabric face mask is to act as a physical barrier to extremely small droplets generally upwards of **5 microns in size** secreted during talking, sneezing or coughing (WHO 29/4/2020).
- c) The higher the performance of the mask with regard to barrier efficiency the better.
- d) Masks must be breathable.
  - i. Should the mask prevent one from breathing easily, this will present a serious danger to the health of the wearer - not only from becoming oxygen deprived but also because the mask will promote risky behavior like the need to touch the face and remove or adjust the mask during wear, increasing the risk of transmission of the virus.
- e) Masks must be designed to fit properly and be comfortable to wear.
  - i. Mask style and design features will contribute to user fit which should follow closely the contours of the face especially around the nose bridge and under the chin to reduce leakage out and into the mask.
- f) Mask style and design features will contribute to user fit which should follow closely the contours of the face especially around the nose bridge and under the chin to reduce leakage out and into the mask.
- g) Cleaning and disinfection of all the components should be easy to carry out at home.
- h) All components should be durable and should maintain their integrity during the full expected life span of the product or components.
- i) All masks should be accompanied by instructions clearly explaining how it should be worn and cared for what the limitations of a mask are and when the mask or its components must be replaced.

<sup>11</sup> Shakya, Kabindra M.; Noyes, Alyssa; Kallin, Randa; Peltier, Richard E. (May 1, 2017). ["Evaluating the efficacy of cloth facemasks in reducing particulate matter exposure"](#)(PDF). Journal of Exposure Science & Environmental Epidemiology.

<sup>12</sup> Chughtai, Abrar Ahmad; Seale, Holly; MacIntyre, Chandini Raina (June 19, 2013). ["Use of cloth masks in the practice of infection control – evidence and policy gaps"](#). International Journal of Infection Control.

## 4 Fabric Selection for Fabric Masks

- a) Tests have shown that at **least two layers** of fabric is are sufficient for balancing performance and comfort (as indicated above).
- b) An increase in the number of layers will improve the barrier efficiency, but have the opposite effect on breathability.
- c) **Using three layers, selecting a non-woven (or similar) fabric with strong filtering capability (barrier efficiency) as the middle layer (with the accompanying inner and outer layers providing comfort, structure, and some additional protection) is recommended.**
  - a) Ideally this middle layer (filter) should be inserted into the mask (or removed) via an ‘envelope’ style design to allow for improved cleaning and easy replacement filters when worn out.
  - b) It is recommended that the pocket into which it fits be at least 120 mm by 100 mm to ensure compatibility between multiple masks and filters in production domestically.
  - c) Clear markings or design options must be used to distinguish between the outside of the mask and the inside of the mask.

### 4.1 Guidelines for Fabric Selection

#### 4.1.1 Inner Layer (next to face)

- a) The main purpose of this layer is to provide a smooth, soft, pleasant feel against the skin.
- b) The fabric should not irritate the skin in any way or allow the build-up of moisture or excessive heat in between the skin and the mask.
- c) Avoid water repellent fabric that inhibit the absorption of droplets. It must not wet easily or accumulate excessive moisture with breathing.
- d) The fabric should have very high air permeability and should not restrict normal breathing.
- e) Synthetic fibres are recommended for quick drying properties.
- f) If cotton, poly-cotton or viscose are used, care should be taken as these fabrics can be highly water absorbent and might become wet against the skin. They can also impact on heat generation, potential fibre/fluff shedding and drying time after washing.

- g) Options: Plain weaves (lightweight, low count), warp knit polyester 'mesh'; lightweight single jersey, spunbond nonwovens (providing air permeability is high and fabric is washable)

#### 4.1.2 Middle Layer (optional filter layer)

- a) **The primary function of this layer is to trap or stop particles 5 micron and larger.**
- b) It should have a **barrier efficiency of at least 75%.**
- c) Filter fabric should not restrict air permeability or impede on the air permeability of the completed mask.
- d) It is suggested that the filter fabric should not block > 25 % of airflow through the fabric.
- e) Filter fabric should not shed fibres or disintegrate with use in any way, causing potential of fibre inhalation or failure to filter.
- f) It should not add or create unnecessary heat load.
- g) Filter should be replaceable via a pouch between inner and outer layer of mask (envelope).
- h) It must be possible to disinfect filter daily or wash with hot water [Minimum filter size 100mm x 120mmm]
- i) Ideal product – non-woven or similarly performing fabric that meets the recommended requirements.

#### 4.1.3 Outer Layer (faces outwards)

- a) This layer can be woven, warp- knitted or made from a suitable nonwoven fabric.
- b) Fabrics should not allow liquids to move through them.
- c) Hydrophobic or water repellent properties are recommended to prevent wetting from external sources and improve soil repellence.
- d) Fabrics should not restrict normal breathing.
- e) Care should be taken that this layer does not ruin the breathability of the mask
- f) Fabric choice should be suitable for the design of the mask - some designs may require a firmer fabric while others may require fabrics with more drape.
- g) A firm finish will prevent the mask from collapsing with breathing.
- h) Outer and inner layers can potentially be of the same fabric.

#### 4.1.4 General Remarks

- a) Fabrics should not contain any toxic chemicals or excessive lint (especially the inner layer).
- b) The outward facing and inward facing of the mask must be clearly distinguished.
- c) **A new prototype can be easily tested for comfort by wearing it for at least 30 minutes.**
- d) Disinfection of all the components should be easy to carry out at home and components must not deteriorate with use/cleaning.
- e) Fabrics should be able to resist washing in hot water – not easily damaged.
- f) Components that are not removable should be resistant to at least 100 wash cycles.
- g) It must be ensured that proper airflow is achieved when all the layers are combined.
- h) One component with poor air permeability can cause a total failure in breathability
- i) **NOTE: If a filter layer is not used, the combination of the two layers must provide a 5 micron particle barrier efficiency of at least 75%.**

## 5 Designs for Fabric Masks

- a) Mask style and design features will contribute to user fit and should follow closely the contours of the face especially around the nose bridge and under the chin to reduce leakage out and into the mask.
- b) A wire insert, in middle of the mask that sits over the nose bridge area of mask, will allow the user to mould the shape of the mask around the nose bridge for a closer fit.
- c) Comfortable elastic bands/or cloth tie-straps of adequate size and shape for attachment either around the ears or the head should **facilitate comfortable fit.**
- d) Further adjustments to the dimension of this elastic/cloth tie-straps will enhance fit for more users permitting flexibility in the adjustment.
- e) The ties or elastics used to fit the mask to the face should not be designed to require that the wearer touches the front of the mask at all.
- f) Masks should be comfortable to wear. Fabrics selection should consider performance properties such as moisture management and thermal discomfort (guideline for fabric selection 4.1 above).
- g) Discomfort will undermine one's health by promoting the need to touch the face and remove or adjust the mask during wear.
- h) Bearing in mind that different fabric constructions and innovations allow for different properties and functions, there is merit in a mask designed from **at least two layers of**

**suitable fabric or three layers of such fabric** (two layers plus an extra third barrier/filtration layer in the centre).

- i) Masks must be designed to fit properly, ideally covering at least 50% of the length of the nose and fit to 25mm under the chin.
  - a. A guideline for the adult size of pleated mask designs is 180mm for the width and 160mm for the length (maximum unpeated length).
- j) Additionally, manufacturers should indicate sizing of masks:
  - i. Adults: S/M/L/XL
  - ii. Children: S/M/L
- k) Children sizes can be considered by downsizing the adult sizes until further anthropometric data is available to guide a more informed decision.
- l) The suggested size for the removable filter is 120 x 100 mm.
- m) The dimension for a simple pleated masks design is illustrated below:



- j) It is useful to provide markings or features that help the wearer to distinguish between the inner layer and outer layer of the mask in order to prevent wearers from placing the wrong side against their faces.
- k) **Special needs may arise within some groups of society** (such as hearing-impaired individuals who rely on lip reading) whose needs should also be considered when making masks.
- l) Other users such as children and those wearing spectacles should also be considered.
- m) Fabric Face Masks for different seasons and climates must also be considered.
- n) When adjusting to climate and seasonal needs, the fabric used should follow recommended guidelines – adjustments must not compromise fabric functionality as described in the guidelines.

## 6 Instructions for Using Fabric Masks

- a) Clear instructions should be provided to consumers about the capabilities and limitations of masks.
- b) At the very least guidance should be given that when re-usable fabric masks are worn:
- c) They do not constitute medical PPE nor are they a replacement for normal precautionary hygienic measures such as handwashing, not touching one's face, coughing or sneezing into a tissue or elbow and keeping a proper social distance of 1,5m from other people.
- d) The wearer should ensure the masks have been appropriately washed and disinfected before use
- e) Clear instructions must be provided around the proper protocol for wearing masks, including at a minimum that wearers should avoid touching the mask during use and that when putting on or taking off the mask, one's hands must have been cleansed after practicing appropriate hand hygiene;
- f) That re-usable masks or the components used within the masks may need to be replaced if they are damaged or worn out, or if they have exceeded their lifespans or use; and
- g) **That children should be supervised at all times when using a cloth mask**, and they are not recommended for infants who may struggle to breathe with a mask or even choke if they put parts in their mouths.
- h) **A user-guide MUST be supplied with a mask on how to wear and how to care for it.**
- i) A fabric face masks should generally not to be used by Health workers, working in a health care environment.

---

### Enquiries:

Mahendra Shunmoogam

Director: Policy Implementation

The Department of Trade, Industry, and Competition

77 Meintjies Street, Sunnyside

Pretoria, 0002

T: +27 (12) 394 9500

E: [mshunmoogam@thedtic.gov.za](mailto:mshunmoogam@thedtic.gov.za)

## 7 Appendix A: Reference List of Local Textile Manufacturers.

Reference list of local manufacturers of nonwoven and woven textiles and elastics for inputs for fabric face masks for the public<sup>13</sup>.

### 7.1 Manufacturers of Nonwoven Textiles

Company	Key contacts	Province	Category/ies	Product/s that your company can offer clothing manufacturers for making masks, and practical description of how your product/s assist in protection
Beier Envirotec	Posh Moodley: 083 708 5378 <a href="mailto:pmoodley@beier.co.za">pmoodley@beier.co.za</a>	KZN	Fabrics	Manufacturer of: needle punched nonwovens. Can be used as the outer layer of masks.  Their nonwovens provide dust loading capacity, comfort and a level of filtration and mouldability.
Brits Nonwovens	Dicky Coetzee: 082 901 4117 <a href="mailto:dicky.coetzee@brits.co.za">dicky.coetzee@brits.co.za</a>	KZN	Filters	Manufacturer of: Polypropylene/ polyester combination filters. Can be used as filter in the middle of two layers of fabric.  Can produce 50m per month
Feltex Nonwovens	Robert Gooch: 082 905 9958 <a href="mailto:robertg@feltex.co.za">robertg@feltex.co.za</a>  John Mauer: 082 909 4402 <a href="mailto:Johnm@feltex.co.za">Johnm@feltex.co.za</a>	KZN	Fabrics	Manufacturer of: needle punched nonwovens. Could be used as inner or outer layer of masks.  At the moment they do not supply products outside of the automotive industry, but they would be happy to work with mask manufacturers to try and meet the standards required for face masks.
Fibertex	Sefton Fripp: 082 903 6714 <a href="mailto:SEFR@fibertex.com">SEFR@fibertex.com</a>  Clive Hitchcock: 076 413 0899 <a href="mailto:cahi@fibertex.com">cahi@fibertex.com</a>	KZN	Filters	Manufacturer or: nonwovens and nanofiber treated products. Can be used as inner or middle (filter) fabrics and media.  Functions include moulding support, particulate efficiency layers and barriers. Their adhetex product is made from PET/ PVDF fine fibres is a nano material most commonly used in High-Energy Particulate Arresting (HEPA) filters for masks, A/C units, automotive components and domestic filters i.e. vacuum cleaners. Their breathetex product is made from

<sup>13</sup> This list is subject to available information and will be updated regularly. Please monitor the DTIC's website periodically for updates.

				polyester and is one of the components in FFP1 & 2 masks where it is used to mould and shape the masks. It sits adjacent to the melt-blown and outer spunbond layer
<b>Filtafelt</b>	Anil Chandran: 076 170 0702 <a href="mailto:Anil@iffgroup.com">Anil@iffgroup.com</a>	Gauteng	Fabrics & Filters	<p>Manufacturer of: nonwovens that can be used as outer and inner layer of masks, and filters.</p> <p>Their 200 gram/m<sup>2</sup> weight, 300 gram/m<sup>2</sup> weight and 400 gram/m<sup>2</sup> weight Polypropylene nonwoven may be used to manufacture masks.</p>
<b>Freudenberg Nonwovens</b>	Fiona Shaw: 083 658 4095 <a href="mailto:Fiona.Shaw@freudenberg-pm.com">Fiona.Shaw@freudenberg-pm.com</a>	W. Cape	Fabrics & Filters	<p>Manufacturer of: nonwovens that can be used as outer and inner layer of masks, and filters.</p> <p>They can produce a dense polyester nonwoven filter layer, as well as hydrophobic and hydrophilic nonwovens as necessary.</p>
<b>Inno Textiles</b>	Oliver Wilhelm: 082 440 7021 <a href="mailto:oliver@innotextiles.co.za">oliver@innotextiles.co.za</a>	KZN	Filters	<p>Manufacturer of: nonwoven fabric for outer or inner layer of mask and middle filter.</p> <p>They produce needled and heat-set or calendered filter media manufactured from 100% polyester in weight ranges from 120g/m<sup>2</sup> and up. Their products can be moulded, sewn or welded to make masks. Media could be used as the middle layer of a three layer mask, or if they produce a slightly heavier media at about 200g/m<sup>2</sup>, this might be used for manufacturing a single layer mask. Can produce 5000m per day if required.</p>
<b>Romatex Home Textiles</b>	Helmut Höck, +27 (82) 566 7522 , +27 (21) 933 9800, <a href="mailto:helmuth@romatex.co.za">helmuth@romatex.co.za</a>	KZN & Western Cape		<p>Manufacturer of: nonwoven fabric that can be used as the filler (middle layer) or the outer layer in a multi-layered mask.</p> <p>They manufacture 100% polyester non-allergenic non-woven fabric.</p>

<p><b>Spunchem</b></p>	<p>Gary Sweeney: 082 652 0463 <a href="mailto:garys@spunchem.co.za">garys@spunchem.co.za</a></p> <p>Thokozani Mbhamali <a href="mailto:thokozanim@spunchem.co.za">thokozanim@spunchem.co.za</a></p> <p>Sandy Stewart: 074 999 7009 <a href="mailto:sandys@spunchem.co.za">sandys@spunchem.co.za</a></p>	<p>KZN</p>	<p>Fabrics &amp; Filters</p>	<p>Manufacturer of: nonwoven fabrics. Can be used as inner and outer layers, as well as middle filter.</p> <p>Spunbond can be produced to any gsm and can be used as a highly breathable outer and inner layer. Standard meltblown is produced to 25gsm to 50gsm and can be used as a middle layer filter. It has medium bacterial filtration properties and is breathable. They are in the process of developing electrostatic meltblown which can be used as a middle layer and forms a viable anti-viral filter.</p>
<p><b>Vitafoam</b></p>	<p>Aldrin John: 083 795 1085 <a href="mailto:aldrin.john@vitafoam.co.za">aldrin.john@vitafoam.co.za</a></p> <p>Loren van Jaarsveld <a href="mailto:loren.vanjaarsveldt@vitafoam.co.za">loren.vanjaarsveldt@vitafoam.co.za</a></p> <p>Johan Booysen <a href="mailto:johan.booyesen@vitafoam.co.za">johan.booyesen@vitafoam.co.za</a></p>	<p>Gauteng</p>	<p>Fabrics &amp; Filters</p>	<p>Manufacturer of: nonwoven fabric and nonwoven filters.</p> <p>Can be used for inner or outer layer (highly breathable hydrophobic spunbond of any gsm), and middle filter (presently running tests of whether their flexible polyurethane foam 4mm low density can be used as a filter)</p>

## 7.2 Manufacturers of Woven Textiles

Company	Key contacts	Province	Category/ies	Product/s that your company can offer clothing manufacturers for making masks, and practical description of how your product/s assist in protection
Aunde Tap	Sean Kennedy: 083 615 0298 <a href="mailto:sean.kennedy@aunde.co.za">sean.kennedy@aunde.co.za</a>	KZN	Fabrics	Manufacturer of: Woven and warpknit 100% polyester fabrics. Can be used as the outer layers for masks.
Da Gama Textiles	Kelvyn Breetzke: 083 297 1485 <a href="mailto:kbreetzke@cowie.co.za">kbreetzke@cowie.co.za</a>	E. Cape	Fabrics	<p>Manufacturer of: cotton and polycotton woven fabrics. Can be utilised as the inner and outer layer of the mask</p> <p>Specifically supply: (1) CC484 (P48): 100% cotton sheeting, tight weave and can withstand high temp wash; (2) PCS7: 50/50 poly/cott sheeting , tight weave and can withstand high temp wash; (3) FT3: 100% cotton winter sheeting Flannel , comfort and tight weave; and (4) CJ54 (J54): 100% cotton twill excellent for outside layers , strong and tightly woven, would be able to last many washes</p>
Deslee Mattex	<p>Michael Borchers 082 441 7305 <a href="mailto:michaelb@desleemattex.co.za">michaelb@desleemattex.co.za</a></p> <p>Larry Unterhalter 082 447 4091 <a href="mailto:larryu@desleemattex.co.za">larryu@desleemattex.co.za</a></p>	W. Cape	Fabrics	<p>Manufacturer of: Woven fabrics of Polyester, Polypropylene, Viscose and cotton. Their fabric can be utilized as both the inner and outer layers of the mask.</p> <p>Fabrics have the following properties: hydrophobic; breathable; washable; and do not contain toxic chemicals. Utilize high density yarns and can customize the fabrics pick count to ensure a pore size of 5 micron or less as per the guidelines. Capable of applying an antimicrobial and antibacterial finish to the woven fabrics which would also assist in reducing infection..</p> <p>Able to produce 21 000 meters of woven fabric per day. .</p>
Finlam Textiles	Janice Roberts: 084 083 0404 <a href="mailto:jroberts@finlamtechnical.com">jroberts@finlamtechnical.com</a>	KZN	Fabrics	Manufacturer of: woven polyester fabrics, circular knitted polyester fabrics, specialised lamination (breathable hydrophilic membranes, PU membranes, PVC films etc, and coating, dyeing and finishing of woven fabrics. Can be used as outer and inner layers of mask

<b>Gelvenor Textiles</b>	<p>Thomas Adlam: 082 774 0758 <a href="mailto:tadlam@gelvenor.co.za">tadlam@gelvenor.co.za</a></p> <p>Steve Fitzjohn: 066 264 4581 <a href="mailto:sfitzjohn@gelvenor.co.za">sfitzjohn@gelvenor.co.za</a></p>	KZN	Fabrics	<p>Manufacturer of: Woven polyester fabric. Can be used for outer and inner layers of masks.</p> <p>Produce hydrophobic finish, breathable to FFP rated mask standards – with option to do anti-bacterial/ microbial finish. The fabric is durable and has been tested to keep its functionality for up to 40 washes under specific conditions equivalent to a basic disposable face mask</p>
<b>Imraan Textiles</b>	<p>Imraan Bux : 083 325 3243 <a href="mailto:ibux@itmkn.co.za">ibux@itmkn.co.za</a></p> <p>Andrew Broughton: 083 3006535 <a href="mailto:bwerdna@tiscali.co.za">bwerdna@tiscali.co.za</a></p>	KZN	Fabrics	<p>Manufacturer of: woven polyester as well as poly-viscose fabrics. Can be used as inner and outer layer of masks.</p> <p>Customisable colours; minimised linting; can be easily washed without changing fabric properties.</p> <p>Materials and capacity for large volume production.</p>
<b>Korteks Textiles</b>	<p>Zayd Tayob: 082 900 5786 <a href="mailto:zayd@zaydtex.com">zayd@zaydtex.com</a></p> <p>Khabir Tayob <a href="mailto:khabir@zaydtex.com">khabir@zaydtex.com</a></p>	Gauteng	Fabrics	<p>Manufacturer of: 100% polyester woven and warpknit fabrics. Can be used for outer and inner layer of a mask. The warpknit could be used as a filter</p> <p>They have equipment to treat the fabric so that it is water resistant. The warp knitted fabric is a high density net like fabric which could be used as a filter fabric and can be washed and reused easily. It has no stretch.</p>
<b>Nu-Mym Textiles</b>	<p>Farhaad Vally 081 352 2225 <a href="mailto:Numymtex@telkomsa.net">Numymtex@telkomsa.net</a></p>	KZN	Fabrics	<p>Manufacturer of: 1. We can polyester, poly-cotton, cotton and poly-viscose fabrics. Can be used for inner or outer layers of mask.</p> <p>They produce 100% polyester, 65/35 poly-viscose, 100% cotton and 65/ 35 poly-cotton. They can add a blood guard, antibacterial agent and a water repellent finish</p>
<b>Suntex</b>	<p>Eddy Sun 082 333 3888 <a href="mailto:esun@suntex.co.za">esun@suntex.co.za</a></p>	E. Cape	Fabrics	<p>Manufacturer of: woven fabrics. Can be used for outer layer and inner layer</p> <p>Outer layer can be +- 200 gsm woven fabrics in 100% texturized polyester yarns with water repellent finish. Inner layer can be +- 70 gsm 100% texturized or non texturized polyester yarns</p>
<b>Svenmill</b>	<p>Brent Greenblatt: 083 995 8600 <a href="mailto:the_mill@svenmill.co.za">the_mill@svenmill.co.za</a></p>	W. Cape	Fabrics	<p>Manufacturer of: woven fabrics</p> <p>Can be used for inner and outer layers. Can supply 280cm wide fabrics, a mixture of polycotton (50:50) or 100% cotton. Fabric can be treated with anti-</p>

				bacterial nanotechnology silver proven to kill 99.99% of bacteria. Awaiting anti-viral results currently in lab testing.
<b>Umzinto Textiles</b>	Muhammad Paruk: 0827862623 <a href="mailto:mparuk45@outlook.com">mparuk45@outlook.com</a>	KZN	Fabrics	Manufacturer of: woven fabrics  Capable of weaving fabrics. Can do specialized finishes such as anti-microbial and anti-bacterial breathable finishes to various textiles up to a max width of 220cm .
<b>Winelands Textiles</b>	Peter Gaal: 082 441 2938 <a href="mailto:pgaal@winetex.co.za">pgaal@winetex.co.za</a> Juanita Wilkinson (Hextex office) <a href="mailto:jwilkinson@winetex.co.za">jwilkinson@winetex.co.za</a> Karen Bouwer (WC, EC) <a href="mailto:kbouwer@winetex.co.za">kbouwer@winetex.co.za</a> Arif Cassim (GAUT) <a href="mailto:acassim@winetex.co.za">acassim@winetex.co.za</a> Andrew Guy (KZN) <a href="mailto:McNair.Guy@telkomsa.net">McNair.Guy@telkomsa.net</a>	W. Cape	Fabrics	Manufacturer of: woven fabrics. Can be used for inner or outer layer.  Can supply range of polyester viscose, poly-cotton and cottons. Able to finish products with fluid resistant finishes