

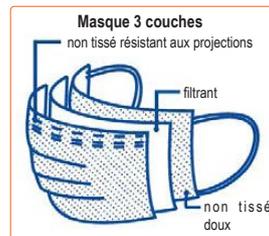
## Masques chirurgicaux 3 plis avec élastiques auriculaires

Cat. I

EN 14683 Type IIR

certification  
DM 93/42/CE

- masques 3 couches 175 x 95 mm
- revêtement intérieur en tissu non tissé doux et conformable, coloris blanc
- couche filtrante haute densité
- revêtement extérieur en tissu non tissé résistant aux projections, coloris bleu
- attache par 2 bandes auriculaires en nylon élastique
- clip de nez : bande métallique 100 mm, entièrement enfermée, réglable facilement
- filtration bactérienne  $\geq 98\%$
- résistance à la traction entre la bande et le corps du masque  $\geq 10N$
- minimisent la contamination causée par les micro-organismes expirés et réduisent l'exposition potentielle du porteur aux fluides corporels
- en boîte distributrice de 50



référence

Prix HT

RU1080 Masques médicaux 3 plis, type IIR, BFE 98%, les 50

**EC Certificate**  
**Directive 93/42/EEC Annex V**  
**Production Quality Assurance**  
**Medical Devices**

Registration No.: DD 60111758 0001

Report No.: 15095978 001

**Manufacturer:** Sunsmed Protective Products Ltd.  
No. 18, Industrial Park, Maozui Town  
Xiantao City  
433000 Hubei  
China

**Products:** Aspects of manufacture concerned with securing and maintaining sterile conditions:  
Sterile Surgical Caps, Sterile Surgical Face Masks,  
Sterile Surgical Gowns, Sterile Bed Protections,  
Sterile Surgical Drapes, Sterile Surgical Packs

**Expiry Date:** 2021-08-11

The Notified Body hereby declares that the requirements of Annex V of the directive 93/42/EEC have been met for the listed products. The above named manufacturer has established and applies a quality assurance system, which is subject to periodic surveillance, defined by Annex V, section 4 of the aforementioned directive. For placing on the market of class IIb and class III devices covered by this certificate an EC type-examination certificate according to Annex III is required.

**Effective Date:** 2016-08-12

**Date:** 2016-08-12

Notified Body



X. Ren

**TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg**

TÜV Rheinland LGA Products GmbH is a Notified Body according to Directive 93/42/EEC concerning medical devices with the identification number 0197.

## Bacterial Filtration Efficiency (BFE) and Differential Pressure (Delta P) Final Report

Test Article: Surgical Face Mask  
Purchase Order: SHLAB2003160001A  
Study Number: 1277685-S01  
Study Received Date: 16 Mar 2020  
Testing Facility: Nelson Laboratories, LLC  
6280 S. Redwood Rd.  
Salt Lake City, UT 84123 U.S.A.  
Test Procedure(s): Standard Test Protocol (STP) Number: STP0004 Rev 18  
Deviation(s): None

**Summary:** The BFE test is performed to determine the filtration efficiency of test articles by comparing the bacterial control counts upstream of the test article to the bacterial counts downstream. A suspension of *Staphylococcus aureus* was aerosolized using a nebulizer and delivered to the test article at a constant flow rate and fixed air pressure. The challenge delivery was maintained at  $1.7 - 3.0 \times 10^3$  colony forming units (CFU) with a mean particle size (MPS) of  $3.0 \pm 0.3 \mu\text{m}$ . The aerosols were drawn through a six-stage, viable particle, Andersen sampler for collection. This test method complies with ASTM F2101-19 and EN 14683:2019, Annex B.

The Delta P test is performed to determine the breathability of test articles by measuring the differential air pressure on either side of the test article using a manometer, at a constant flow rate. The Delta P test complies with EN 14683:2019, Annex C and ASTM F2100-19.

All test method acceptance criteria were met. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations 21 CFR Parts 210, 211 and 820.

Test Side: Inside  
BFE Test Area:  $\sim 40 \text{ cm}^2$   
BFE Flow Rate: 28.3 Liters per minute (L/min)  
Delta P Flow Rate: 8 Liters per minute (L/min)  
Conditioning Parameters:  $85 \pm 5\%$  relative humidity (RH) and  $21 \pm 5^\circ\text{C}$  for a minimum of 4 hours  
Test Article Dimensions:  $\sim 175 \text{ mm} \times \sim 150 \text{ mm}$   
Positive Control Average:  $2.0 \times 10^3$  CFU  
Negative Monitor Count:  $< 1$  CFU  
MPS:  $3.2 \mu\text{m}$



Study Director

James W. Luskin



23 MAR 2020  
Study Completion Date



1277685-S01

**Results:**

Test Article Number	Percent BFE (%)
1	99.8
2	>99.9
3	>99.9 <sup>a</sup>
4	99.9
5	>99.9

<sup>a</sup> There were no detected colonies on any of the Andersen sampler plates for this test article.

Test Article Number	Delta P (mm H <sub>2</sub> O/cm <sup>2</sup> )	Delta P (Pa/cm <sup>2</sup> )
1	3.8	37.5
2	4.0	39.5
3	4.1	40.0
4	4.2	40.9
5	4.1	40.2

The filtration efficiency percentages were calculated using the following equation:

$$\% BFE = \frac{C - T}{C} \times 100$$

C = Positive control average

T = Plate count total recovered downstream of the test article

Note: The plate count total is available upon request

## Synthetic Blood Penetration Resistance Final Report

Test Article: Surgical Face Mask  
Purchase Order: SHLAB2003160001A  
Study Number: 1277684-S01  
Study Received Date: 16 Mar 2020  
Testing Facility: Nelson Laboratories, LLC  
6280 S. Redwood Rd.  
Salt Lake City, UT 84123 U.S.A.  
Test Procedure(s): Standard Test Protocol (STP) Number: STP0012 Rev 09  
Deviation(s): None

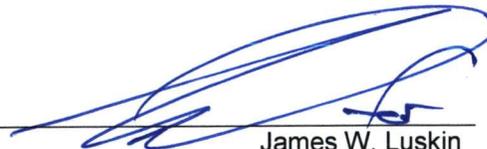
**Summary:** This procedure was performed to evaluate surgical facemasks and other types of protective clothing materials designed to protect against fluid penetration. The purpose of this procedure is to simulate an arterial spray and evaluate the effectiveness of the test article in protecting the user from possible exposure to blood and other body fluids. The distance from the target area surface to the tip of the cannula is 30.5 cm. A test volume of 2 mL of synthetic blood was employed using the targeting plate method.

This test method was designed to comply with ASTM F1862 and ISO 22609 (as referenced in EN 14683:2019 and AS4381:2015) with the following exception: ISO 22609 requires testing to be performed in an environment with a temperature of  $21 \pm 5^\circ\text{C}$  and a relative humidity of  $85 \pm 10\%$ . Instead, testing was performed at ambient conditions within one minute of removal from the environmental chamber held at those parameters.

All test method acceptance criteria were met. Testing was performed in compliance with US FDA good manufacturing practice (GMP) regulations 21 CFR Parts 210, 211 and 820.

Number of Test Articles Tested: 32  
Number of Test Articles Passed: 29  
Test Side: Outside  
Pre-Conditioning: Minimum of 4 hours at  $21 \pm 5^\circ\text{C}$  and  $85 \pm 5\%$  relative humidity (RH)  
Test Conditions:  $22^\circ\text{C}$  and 22% RH

Study Director

  
James W. Luskin

Study Completion Date



23 Mar 2020



1277684-S01

**Results:** Per ASTM F1862 and ISO 22609, an acceptable quality limit of 4.0% is met for a normal single sampling plan when  $\geq 29$  of 32 test articles show passing results.

Test Pressure: 160 mmHg (21.3 kPa)

Test Article Number	Synthetic Blood Penetration
1-8, 10-13, 15-27, 29-32	None Seen
9, 14, 28	Yes



# Certipedia

HOME » SUNSMED PROTECTIVE PRODUCTS LTD. » CERTIFICATE NO. DD 60111758

[« Back](#)

## Certificate No. 60111758

<b>Certificate Number:</b>	60111758 <b>Sunsmed Protective Products Ltd.</b>
<b>Certificate Holder:</b>	No. 18, Industrial Park, Maozui Tow Xiantao City 433000 Hubei China (Mainland)
<b>Scope:</b>	Aspects of manufacture concerned with securing and Sterile Surgical Caps, Sterile Surgical Face Masks, Sterile Surgical Drapes, Sterile Surgical Packs maintaining sterile conditions: Sterile Surgical Gowns, Sterile Bed Protections,
<b>Fulfilled Standards:</b>	Richtlinie 93/42/EWG QMS Produktion, Anhang V MDD The Notified Body authorizes the quality management System established and applied by the Company mentioned in the certificate. The requirements of Annex V, Article 3 of the EC directive 93/42/EEC, referred to as the Medical Device Directive (MDD), have been met. This approval is subject to periodic surveillance, defined in Annex V, Article 4 of the aforementioned EC-Directive, and can be used by the Company with the manufacturer's declaration of conformity.
<b>Certificate Type:</b>	