



## SHIELDskin Xtreme Sterile White Nitrile 400 DI+

pure<sup>11</sup>-Nr.: 05205, Hersteller: Shield Scientific



### Zusammenfassung

- Neue pure11-Artikelnummer (ab 01.07.2023): 1105205
- Material: Nitril
- Handspezifisch
- Puderfrei
- Latexfrei
- AQL-Wert (Acceptable Quality Level): 0.65
- Gammasterilisiert
- Texturierte Handinnenfläche und Fingerspitzen
- Reduziertes Allergierisiko (Type I & Type IV)
- Mikroorganismenresistent
- Typischer Partikelwert <950 per cm<sup>2</sup> = 0.5 µm

### Empfohlene Reinraumklassen

ISO 

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|

GMP 

|  |  |     |  |   |   |  |
|--|--|-----|--|---|---|--|
|  |  | A/B |  | C | D |  |
|--|--|-----|--|---|---|--|

### Produktvarianten

**pure<sup>11</sup>-Nr.: 052056**

Farbe: Weiß / Größe: 6,0 / Herst.-Nr.: 698772 / VE: 160 Paar

**pure<sup>11</sup>-Nr.: 052056b**

Farbe: Weiß / Größe: 6,5 / Herst.-Nr.: 698773 / VE: 160 Paar

**pure<sup>11</sup>-Nr.: 052057**

Farbe: Weiß / Größe: 7,0 / Herst.-Nr.: 698774 / VE: 160 Paar

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**pure<sup>11</sup>-Nr.: 052057b**

Farbe: Weiß / Größe: 7,5 / Herst.-Nr.: 698775 / VE: 160 Paar

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**pure<sup>11</sup>-Nr.: 052058**

Farbe: Weiß / Größe: 8,0 / Herst.-Nr.: 698776 / VE: 160 Paar

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**pure<sup>11</sup>-Nr.: 052058b**

Farbe: Weiß / Größe: 8,5 / Herst.-Nr.: 698777 / VE: 160 Paar

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**pure<sup>11</sup>-Nr.: 052059**

Farbe: Weiß / Größe: 9,0 / Herst.-Nr.: 698778 / VE: 160 Paar

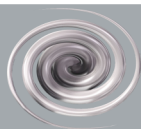
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**pure<sup>11</sup>-Nr.: 0520510**

Farbe: Weiß / Größe: 10,0 / Herst.-Nr.: 698779 / VE: 160 Paar

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Quelle: <https://www.pure11.de/shieldskin-xtreme-sterile-white-nitrile-400-di>



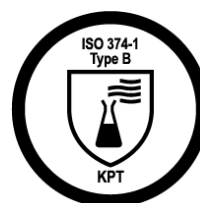
**SHIELDskin XTREME™**  
A REVOLUTION IN GLOVE TECHNOLOGY

**Sterile**

BIO  
CONTAMINATION CONTROL

# SHIELDskin XTREME™

## Sterile White Nitrile 400 DI+





Sterile

Bio  
contamination  
control

DI+

High  
contamination  
control

- ⇒ Powder-free triple DI washed hand-specific extra length (400 mm / 15.7") sterile nitrile cleanroom gloves.
- ⇒ Personal Protective Equipment Category III (PPE - Complex Design) according to Regulation (EU) 2016/425.
- ⇒ Fully compliant to the latest PPE Protective gloves EU norms against chemicals, micro-organisms and viruses.

| DESCRIPTION |                                                                                                |
|-------------|------------------------------------------------------------------------------------------------|
| Formulation | Nitrile synthetic rubber ( <i>acrylonitrile butadiene</i> ).                                   |
| Design      | White, hand-specific, beaded cuff, textured palm and fingers.                                  |
| Packaging   | 1 pair per PE peel pouch - 20 pouches per sealed poly bag - 8 poly bags per PE bag per carton. |

| SIZES | 5.5     | 6.0     | 6.5     | 7.0     | 7.5     | 8.0     | 8.5     | 9       | 10      |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Codes | 69 8771 | 69 8772 | 69 8773 | 69 8774 | 69 8775 | 69 8776 | 69 8777 | 69 8778 | 69 8779 |

| STANDARDS                 |                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| CE registration           | PPE Category III (Complex Design) - Regulation (EU) 2016/425.<br>Notified Body No 0598: SGS Fimko Oy, Helsinki - FINLAND.                       |
| EU PPE norms              | ISO 21420:2020, ISO 374-1:2016+A1:2018, ISO 374-2:2019, ISO 374-4:2019, ISO 374-5:2016, EN 16523-1:2015+A1:2018 and ISO 16604:2004 Procedure B. |
| EU MDR norms <sup>1</sup> | EN 455-1:2000, EN 455-2:2015, EN 455-3:2015 and EN 455-4:2009.                                                                                  |
| USA standards             | ASTM D3767-03 (2020), ASTM D573-04 (2019), ASTM D412-16, ASTM D6978-05 (2019) and IEST-RP-CC005.4 (2013).                                       |
| Other standards           | ISO 11137-2:2015, ISO 10993-10:2010.                                                                                                            |

<sup>1</sup>With reference to Regulation (EU) 2017/425 for Medical Devices

| QUALITY           |                                                                                                                                                                                                                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality assurance | Production management in accordance with ISO 9001:2015 and ISO 13485:2016.                                                                                                                                                                                                                                     |
| Technology        | uniSHIELD™ single-walled protection to offer an ideal compromise between comfort and protection. Synthetic soft polymer based on Skin Nitrile™ technology. Compatible with sterile processing environments due to paperless packaging and multiple post leaching of gloves (triple washed in deionised water). |

| DOCUMENTATION                   |                                                                                                                                                                                                |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Declaration of conformity       | These documents can be freely downloaded from the product page on our website: <a href="http://www.shieldscientific.com">www.shieldscientific.com</a> .                                        |
| EU type examination certificate | For easy access, scan the QR code.                                                                                                                                                             |
| User's instructions             |                                                                                                                                                                                                |
| Certificate of conformance      | To access CoC and CoI, you need to be registered. Please contact us at <a href="mailto:info@shieldscientific.com">info@shieldscientific.com</a> or call your SHIELD Scientific representative. |
| Certificate of irradiation      |                                                                                                                                                                                                |



# PHYSICAL PROPERTIES



| NOMINAL THICKNESS | mm <sup>2</sup> | mil | Norm                 |
|-------------------|-----------------|-----|----------------------|
| ⇒ Finger          | 0.18            | 7.1 | ASTM D3767-03 (2020) |
| ⇒ Palm            | 0.15            | 5.9 |                      |
| ⇒ Cuff            | 0.10            | 3.9 |                      |

<sup>2</sup> Thickness (+/- 0.03 mm)

| LENGTH                                   | Minimum          | Typical        | Norm           |
|------------------------------------------|------------------|----------------|----------------|
| ⇒ From middle finger tip to edge of cuff | ≥ 400 mm / 15.7" | 405 mm / 15.9" | ISO 21420:2020 |

| STRENGTH PROPERTIES | Force at break (spec.) |        | Ultimate elongation (spec.) | Force at break (typical) | Norm                                                   |
|---------------------|------------------------|--------|-----------------------------|--------------------------|--------------------------------------------------------|
| ⇒ Before aging      | ≥ 6.0N                 | 14 MPa | ≥ 500%                      | 10.0N                    | EN 455-2:2015<br>ASTM D573-04 (2019)<br>& ASTM D412-16 |
| ⇒ After aging       | ≥ 6.0N                 | 14 MPa | ≥ 400%                      | 8.0N                     |                                                        |

| FREEDOM FROM HOLES               | Performance                   | Norm                            |
|----------------------------------|-------------------------------|---------------------------------|
| ⇒ Acceptable Quality Level (AQL) | < 0.65 <sup>3</sup> - Level 3 | ISO 374-2:2019<br>EN 455-1:2000 |

<sup>3</sup> AQL as defined per ISO 2859-1:1999 for sampling by attributes.

| RISKS                  | Description                                                                                                                                                                                                                                                                            | Norm                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Micro-organisms        | 1000 ml water test.<br>Performance level 3, AQL < 0.65 (inspection level G1).                                                                                                                                                                                                          | ISO 374-2:2019                                                      |
| Viruses <sup>4</sup>   | Viral penetration test using Phi-X174 bacteriophage according to ISO 16604:2004 Procedure B.                                                                                                                                                                                           | ISO 374-5:2016                                                      |
| Chemicals <sup>4</sup> | <u>Performance</u> : Type B (KPT).<br><u>Permeation</u> : Extensively tested. Online chemical resistance guide on <a href="http://www.shieldscientific.com">www.shieldscientific.com</a> .<br><u>Degradation</u> : Tested for determination of resistance to degradation by chemicals. | ISO 374-1:2016+A1:2018<br>EN 16523-1:2015+A1:2018<br>ISO 374-4:2019 |
| Cytotoxic              | Tested for permeation to potentially hazardous cancer chemotherapy drugs under conditions of continuous contact.                                                                                                                                                                       | ASTM D6978-05 (2019)                                                |

<sup>4</sup> For PPER compliance, > 40 cm gloves are palm and cuff tested for permeation, degradation and viral penetration.

# CLEANLINESS PROPERTIES

| PARTICLES                         | Specification     | Typical value   | Test method     |
|-----------------------------------|-------------------|-----------------|-----------------|
| Particles/cm <sup>2</sup> ≥ 0.5µm | < 1,200 particles | 1,000 particles | IENT-RP-CC005.4 |

| EXTRACTABLES (ION)           | Specification (µg/cm <sup>2</sup> ) | Typical value (µg/cm <sup>2</sup> ) | Test method     |
|------------------------------|-------------------------------------|-------------------------------------|-----------------|
| Ammonium (NH <sub>4</sub> )  | 0.050                               | 0.018                               | IENT-RP-CC005.4 |
| Bromide (Br)                 | 0.030                               | < 0.008                             |                 |
| Calcium (Ca)                 | 0.350                               | 0.250                               |                 |
| Chloride (Cl)                | 0.200                               | 0.110                               |                 |
| Fluoride (F)                 | 0.010                               | < 0.008                             |                 |
| Magnesium (Mg)               | 0.010                               | < 0.008                             |                 |
| Nitrate (NO <sub>3</sub> )   | 0.200                               | 0.050                               |                 |
| Nitrite (NO <sub>2</sub> )   | 0.050                               | < 0.008                             |                 |
| Phosphate (PO <sub>4</sub> ) | 0.050                               | < 0.008                             |                 |
| Potassium (K)                | 0.050                               | 0.023                               |                 |
| Sodium (Na)                  | 0.050                               | 0.012                               |                 |
| Sulphate (SO <sub>4</sub> )  | 0.050                               | 0.015                               |                 |

| EXTRA TESTS | Description                                                                                                           | Test method     |
|-------------|-----------------------------------------------------------------------------------------------------------------------|-----------------|
| Sterility   | Terminally sterilized by gamma irradiation to Sterility Assurance Level (SAL) of 10 <sup>-6</sup> (ISO 11137-2:2015). | EN 455-3:2015   |
| Endotoxins  | Low Endotoxin content at < 20 EU/pair demonstrated by Limulus Amoebocyte Lysate (LAL) kinetic turbidimetric test.     |                 |
| NVR         | Maximum 30 µg/g.                                                                                                      | IENT-RP-CC005.4 |
| FTIR        | Non-detectable levels of silicone, amide and DOP.                                                                     | IENT-RP-CC005.4 |

| ALLERGIES          |                                                                                                                                                                                 |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bio-Compatibility  | Demonstrated by skin irritation and sensitization tests in accordance with ISO 10993-10:2010.                                                                                   |
| Accelerators       | Free of Thiazoles and Thiurams. These chemical accelerators are excluded from the manufacturing process.                                                                        |
| Chemical Allergens | Non-detectable levels using aqueous solution extraction (Phosphate buffered solution) and High Performance Liquid Chromatography (HPLC) assay method for quantitative analysis. |
| Latex Protein      | Latex-free.                                                                                                                                                                     |

# CHEMICAL RESISTANCE GUIDE

|                           |                               |                               |                                |                                 |                                 |                             |
|---------------------------|-------------------------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|-----------------------------|
| <b>Level 0</b><br><10 min | <b>Level 1</b><br>10 - 30 min | <b>Level 2</b><br>30 - 60 min | <b>Level 3</b><br>60 - 120 min | <b>Level 4</b><br>120 - 240 min | <b>Level 5</b><br>240 - 480 min | <b>Level 6</b><br>> 480 min |
|---------------------------|-------------------------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|-----------------------------|

## SHIELDskin XTREME\* Sterile White Nitrile 400 DI+



- Category III PPE glove (PPE Regulation (EU) 2016/425)
- Complex Design - For mortal & irreversible risks
- Powder-free white nitrile glove
- Hand-specific
- 400 mm / 0.15 mm (EN 420:2003+A1:2009)
- AQL 0.65 (EN 374-2:2014 Level 3)
- Biological risk (ISO 374-5:2016 VIRUS)
- Viral penetration test (ISO 16604:2004 Procedure B)
- Chemical risk (ISO 374-1:2016+A1:2018 - Type KPT)
- Waterproof and for low chemical protection
- Tested for chemical permeation (EN 16523-1:2015+A1:2018)
- Typical particle levels: less than 1000 per cm<sup>2</sup> more or equal 0.5µm
- Tested according to EN 1149-1-2-3 & 5

|                                     |                           |
|-------------------------------------|---------------------------|
| 64-19-7<br>Acetic Acid 100%         | <b>LEVEL 0</b><br>6 min   |
| 67-64-1<br>Acetone 99,8%            | <b>LEVEL 0</b><br>1 min   |
| 75-05-8<br>Acetonitrile 99,9%       | <b>LEVEL 0</b><br>1 min   |
| 79-06-1<br>Acrylamide 40%           | <b>LEVEL 6</b><br>480 min |
| 1336-21-6<br>Ammonium Hydroxide 25% | <b>LEVEL 1</b><br>27 min  |
| 110-82-7<br>Cyclohexane             | <b>LEVEL 6</b><br>480 min |
| 75-09-2<br>Dichloromethane 99%      | <b>LEVEL 0</b><br>0 min   |

|                                                      |                    |
|------------------------------------------------------|--------------------|
| 109-89-7<br>Diethylamine 99,5%                       | LEVEL 0<br>0 min   |
| 67-68-5<br>Dimethyl Sulfoxide 99% (DMSO)             | LEVEL 2<br>37 min  |
| 64-17-5<br>Ethanol 99.8%                             | LEVEL 1<br>17 min  |
| 64-17-5<br>Ethanol 70%                               | LEVEL 2<br>46 min  |
| 1239-45-8<br>Ethidium Bromide 5%                     | LEVEL 6<br>480 min |
| 50-00-0<br>Formaldehyde 37%                          | LEVEL 6<br>480 min |
| 111-30-8<br>Glutaraldehyde 25%                       | LEVEL 6<br>480 min |
| 7664-39-3<br>Hydrofluoric Acid 40%                   | LEVEL 1<br>12 min  |
| 7722-84-1<br>Hydrogen Peroxide 30%                   | LEVEL 6<br>480 min |
| 67-63-0<br>Isopropanol 100%                          | LEVEL 2<br>43 min  |
| 67-63-0<br>Isopropanol 70%                           | LEVEL 3<br>113 min |
| Mixed Solution<br>Perform sterile concentrate Oxy 2% | LEVEL 6<br>480 min |
| Mixed Solution<br>Perform sterile concentrate PAA 3% | LEVEL 6<br>480 min |
| Mixed Solution<br>Perform sterile PAA ready to use   | LEVEL 6<br>480 min |



|                                       |                    |
|---------------------------------------|--------------------|
| 1310-73-2<br>Sodium Hydroxide 40%     | LEVEL 6<br>480 min |
| 7681-52-9<br>Sodium Hypochlorite 13%  | LEVEL 6<br>480 min |
| Mixed Solution<br>SPOR-KLENZ Solution | LEVEL 6<br>480 min |
| 7664-93-9<br>Sulphuric Acid 95%-98%   | LEVEL 0<br>7 min   |
| 7664-93-9<br>Sulphuric Acid 50%       | LEVEL 6<br>480 min |

DISCLAIMER: The data provided was based on gloves tested under laboratory conditions, in accordance with EN 16523-1:2015 (formerly EN 374-3:2003) and EN 374-4:2013. The information is for guidance only and may not reflect the user's application. A risk assessment should always be made by purchaser to assess the suitability of gloves for a specific application.



## EU DECLARATION OF CONFORMITY

FOR PERSONAL PROTECTIVE EQUIPEMENT

Originator: J.F ROBLES

Revision: 8

Revision date: 31.12.2019

Validity date: 31.12.2024

|                |                                                                                |
|----------------|--------------------------------------------------------------------------------|
| PRODUCT        | SHIELDskin XTREME™<br>Sterile White Nitrile 400 DI+                            |
| DESCRIPTION    | Powder Free Extra DI washed Pair-packed<br>Hand-specific 40cm Cleanroom Gloves |
| CLASSIFICATION | Personal Protective Equipment (PPE) Category<br>III (Complex Design)           |

| SHIELD Scientific codes | Sizes |
|-------------------------|-------|
| 69 877                  | 5.5   |
| 69 8772                 | 6     |
| 69 8773                 | 6.5   |
| 69 8774                 | 7     |
| 69 8775                 | 7.5   |
| 69 8776                 | 8     |
| 69 8777                 | 8.5   |
| 69 8778                 | 9     |
| 69 8779                 | 10    |

The manufacturer established in the Union:

### SHIELD Scientific B.V.

Dr Willem Dreeslaan 1 – 6721 ND BENNEKOM – THE NETHERLANDS

declares under his/her sole responsibility that the PPE (product codes as mentioned above) described hereafter:

### SHIELDskin XTREME™ Sterile White Nitrile 400 DI+

is in conformity with the provisions of Regulation (EU) 2016/425 and with the harmonized standards EN ISO 374-1:2016 (as a Type B glove against reagents: K, P & T), EN 374-2:2014 (performance level 3, including protection against viruses), EN 16523-1:2015, EN 374-4:2013, EN ISO 374-5:2016 and EN 420:2003 + A1:2009. This device is identical to the PPE, which is the subject of EU Type Examination (Module B) certificate of conformity *no. FI20/123456* (Technical file submitted/Notified Body answer pending) issued by the Notified Body:

**SGS FIMKO OY (Notified Body No: 0598)**  
**Särkiniementie 3 - 00211 Helsinki - Finland**

This device is subject to the procedure set out in Article VIII (Module D) of the Regulation under the surveillance of the Notified Body:

**SGS FIMKO OY (Notified Body No: 0598)**  
**Särkiniementie 3 - 00211 Helsinki - Finland**

Signed for and behalf of SHIELD Scientific B.V



J.F ROBLES  
General Manager

Date: 31<sup>th</sup> December 2019

Place: Bennekom

Validity of this declaration: 31<sup>th</sup> December 2019 until 31<sup>th</sup> December 2024