# pure<sup>11</sup>



#### **Empfohlene Reinraumklassen**

**ISO** 3 | 4 | 5 | 6 | 7 | 8 | 9

GMP C D



# Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031XS

pure<sup>11</sup>-Nr.: 1105010, Marke: Halyard

#### Eigenschaften

Marke: Halyard

• Handschuhtyp: Dünnfilm

• Länge in cm: 30,5 cm

• Chemikalienbeständigkeit - Typ: Typ C

Puderfrei

Material: Nitril

• Texturierte Fingerspitzen

Zytostatikageeignet

• Lebensmittelkonformität

Silikonfrei

Vulkanisationsbeschleunigerfrei

Verpackungsform: Beutel

Antistatisch

• AQL (Acceptable Quality Level)-Wert: 0,65

• Chemikalienbeständig gegen Isopropanol (70%): Level 1 (10-30min)

• Länge in Inches: 12 In

Latexfrei

• Reißfestigkeit EN 455-2 ASTM in MPa: 20-30

Schutz vor Blut und K\u00f6rpersekreten ISO 16604:2004

AG München HRB 171307

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# pure<sup>11</sup>

- Passform Hand: beidhändig
- Viren-/Mikroorganismenschutz EN ISO 374-5:2016
- Wandstärke Mittelfinger in mm: 0,1 mm

#### Material

Nitril

#### Verpackung

• 1500STK

#### **Produktvarianten**

pure<sup>11</sup>-Nr.: 1105010BLXS, Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031XS

Farbe: Blau; Größe: XS / VE: 1500STK

pure<sup>11</sup>-Nr.: 1105010BLL, Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031LG

Farbe: Blau; Größe: L / VE: 1500STK

pure11-Nr.: 1105010BLM, Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031MD

Farbe: Blau; Größe: M / VE: 1500STK

pure<sup>11</sup>-Nr.: 1105010BLS, Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031SM

Farbe: Blau; Größe: S / VE: 1500STK

pure<sup>11</sup>-Nr.: 1105010BLXL, Nitril-Handschuhe PUREZERO HG3 (blue) #CLN9031XL

Farbe: Blau; Größe: XL / VE: 1500STK

pure<sup>11</sup> GmbH

Bavariafilmplatz 7 | D-82031 Grünwald

Geschäftsführung: Julian Kropp, Linda Vereycken, Lars Engeler

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July 14th, 2021

RE: HALYARD\* PUREZERO\* HG3 Nitrile Gloves

Dear Valued Customer,

This letter is in response to your recent inquiry regarding EN 1149 testing on HALYARD\* PUREZERO\* HG3 Nitrile Gloves.

The data provided on the following pages reflect the test results of HALYARD\* PUREZERO\* HG3 Nitrile Gloves for electrostatic properties in accordance with EN 1149-1:2006 "Protective Clothing - Electrostatic Properties - Part 1: Test Method for Measurement of Surface Resistivity" and EN 1149-3:2004 (Method 2) "Protective Clothing - Electrostatic Properties - Part 3: Test Method for Measurement of Charge Decay".

The tests were performed at Intertek Testing Services in the UK with a report issuance of 05.07.2021.

#### Description of the Tested Gloves:

SAMPLE A - HALYARD\* PUREZERO\* HG3 Sterile White Nitrile Gloves

SAMPLE B - HALYARD\* PUREZERO\* HG3 White Nitrile Gloves

SAMPLE C - HALYARD\* PUREZERO\* HG3 Sterile Light Blue Nitrile Gloves

SAMPLE D - HALYARD\* PUREZERO\* SMOOTH HG3 White Nitrile Gloves

SAMPLE E - HALYARD\* PUREZERO\* HG3 Light Blue Nitrile Gloves



#### SAMPLE A - HALYARD\* PUREZERO\* HG3 Sterile White Nitrile Gloves

## Surface Resistivity Test (EN 1149-1: 2006) Sample A

#### **Determination of Surface Resistivity**

The surface resistivity of 5 areas across the sample was determined according to the method specified in BS EN 1149-1: 2006

Surface	Surface Resistance ( $\Omega$ )	Surface Resistivity ( $\Omega$ )
Face	1.1 x 10 <sup>12</sup>	2.2 x 10 <sup>13</sup>
Face	1.7 x 10 <sup>12</sup>	$3.4 \times 10^{13}$
Face	1.9 x 10 <sup>12</sup>	3.8 x 10 <sup>13</sup>
Face	1.0 x 10 <sup>12</sup>	$2.0 \times 10^{13}$
Face	$1.4 \times 10^{12}$	2.8 x 10 <sup>13</sup>
Mean	$1.4 \times 10^{12}$	2.7 x 10 <sup>13</sup>
Reverse	1.3 x 10 <sup>12</sup>	2.6 x 10 <sup>13</sup>
Reverse	1.9 x 10 <sup>12</sup>	$3.8 \times 10^{13}$
Reverse	2.4 x 10 <sup>12</sup>	4.8 x 10 <sup>13</sup>
Reverse	2.1 x 10 <sup>12</sup>	4.2 x 10 <sup>13</sup>
Reverse	1.8 x 10 <sup>12</sup>	3.6 x 10 <sup>13</sup>
Mean	$1.9 \times 10^{12}$	$3.7 \times 10^{13}$

Note: The fabric was not subjected to a pre-wash due to being intended for single use only.

#### Induction Decay Test (EN 1149-3: 2004 Method 2)

#### **Determination of Induction Decay Time**

	Shielding Factor (S)	Half Decay Time t <sub>50</sub> (Secs)
1	0.00	21.50
2	0.00	20.15
3	0.00	>30.00
Mean	0.00	≥23.88



#### SAMPLE B - HALYARD\* PUREZERO\* HG3 White Nitrile Gloves

#### Surface Resistivity Test (EN 1149-1: 2006) Sample B

#### **Determination of Surface Resistivity**

The surface resistivity of 5 areas across the sample was determined according to the method specified in BS EN 1149-1: 2006

Surface	Surface Resistance ( $\Omega$ )	Surface Resistivity ( $\Omega$ )
Face	5.3 x 10 <sup>11</sup>	1.0 x 10 <sup>13</sup>
Face	5.1 x 10 <sup>11</sup>	$1.0 \times 10^{13}$
Face	5.9 x 10 <sup>11</sup>	1.2 x 10 <sup>13</sup>
Face	5.9 x 10 <sup>11</sup>	1.2 x 10 <sup>13</sup>
Face	$6.4 \times 10^{11}$	1.3 x 10 <sup>13</sup>
Mean	5.7 x 10 <sup>11</sup>	$1.1 \times 10^{13}$
Reverse	7.6 x 10 <sup>11</sup>	1.5 x 10 <sup>13</sup>
Reverse	$7.4 \times 10^{11}$	1.5 x 10 <sup>13</sup>
Reverse	6.8 x 10 <sup>11</sup>	1.3 x 10 <sup>13</sup>
Reverse	6.4 x 10 <sup>11</sup>	1.3 x 10 <sup>13</sup>
Reverse	6.6 x 10 <sup>11</sup>	1.3 x 10 <sup>13</sup>
Mean	6.9 x 10 <sup>11</sup>	$1.4 \times 10^{13}$

Note: The fabric was not subjected to a pre-wash due to being intended for single use only.

#### Induction Decay Test (EN 1149-3: 2004 Method 2)

#### **Determination of Induction Decay Time**

	Shielding Factor (S)	Half Decay Time t <sub>50</sub> (Secs)
1	0.01	12.50
2	0.01	6.96
3	0.00	8.86
Mean	0.01	9.42



#### SAMPLE C - HALYARD\* PUREZERO\* HG3 Sterile Light Blue Nitrile Gloves

## Surface Resistivity Test (EN 1149-1: 2006) Sample C

#### **Determination of Surface Resistivity**

The surface resistivity of 5 areas across the sample was determined according to the method specified in BS EN 1149-1: 2006

Surface	Surface Resistance ( $\Omega$ )	Surface Resistivity (Ω)
Face	$2.4 \times 10^{12}$	4.8 x 10 <sup>13</sup>
Face	2.1 x 10 <sup>12</sup>	4.2 x 10 <sup>13</sup>
Face	1.8 x 10 <sup>12</sup>	3.6 x 10 <sup>13</sup>
Face	2.6 x 10 <sup>12</sup>	5.1 x 10 <sup>13</sup>
Face	2.5 x 10 <sup>12</sup>	$5.0 \times 10^{13}$
Mean	$2.3 \times 10^{12}$	$4.5 \times 10^{13}$
Reverse	$1.7 \times 10^{12}$	3.4 x 10 <sup>13</sup>
Reverse	2.1 x 10 <sup>12</sup>	4.2 x 10 <sup>13</sup>
Reverse	2.8 x 10 <sup>12</sup>	5.5 x 10 <sup>13</sup>
Reverse	2.0 x 10 <sup>12</sup>	$4.0 \times 10^{13}$
Reverse	$2.4 \times 10^{12}$	4.8 x 10 <sup>13</sup>
Mean	$2.2 \times 10^{12}$	4.3 x 10 <sup>13</sup>

Note: The fabric was not subjected to a pre-wash due to being intended for single use only.

#### Induction Decay Test (EN 1149-3: 2004 Method 2)

#### **Determination of Induction Decay Time**

	Shielding Factor (S)	Half Decay Time t <sub>50</sub> (Secs)
1	0.00	>30.00
2	0.00	>30.00
3	0.00	>30.00
Mean	0.00	>30.00



#### SAMPLE D - HALYARD\* PUREZERO\* SMOOTH HG3 White Nitrile Gloves

#### Surface Resistivity Test (EN 1149-1: 2006) Sample D

#### **Determination of Surface Resistivity**

The surface resistivity of 5 areas across the sample was determined according to the method specified in BS EN 1149-1: 2006

Surface	Surface Resistance ( $\Omega$ )	Surface Resistivity ( $\Omega$ )
Face	1.2 × 10 <sup>12</sup>	2.4 x 10 <sup>13</sup>
Face	1.4 x 10 <sup>12</sup>	2.8 x 10 <sup>13</sup>
Face	$1.8 \times 10^{12}$	$3.6 \times 10^{13}$
Face	1.8 x 10 <sup>12</sup>	3.6 x 10 <sup>13</sup>
Face	$1.1 \times 10^{12}$	2.2 x 10 <sup>13</sup>
Mean	$1.4 \times 10^{12}$	2.8 x 10 <sup>13</sup>
Reverse	$1.0 \times 10^{12}$	2.0 x 10 <sup>13</sup>
Reverse	1.6 x 10 <sup>12</sup>	3.2 x 10 <sup>13</sup>
Reverse	1.1 x 10 <sup>12</sup>	2.2 x 10 <sup>13</sup>
Reverse	1.5 x 10 <sup>12</sup>	$3.0 \times 10^{13}$
Reverse	$1.9 \times 10^{12}$	3.8 x 10 <sup>13</sup>
Mean	1.4 x 10 <sup>12</sup>	2.7 x 10 <sup>13</sup>

Note: The fabric was not subjected to a pre-wash due to being intended for single use only.

#### Induction Decay Test (EN 1149-3: 2004 Method 2)

#### **Determination of Induction Decay Time**

	Shielding Factor (S)	Half Decay Time t <sub>50</sub> (Secs)
1	0.00	9.37
2	0.00	7.85
3	0.00	13.05
Mean	0.00	10.09



#### SAMPLE E - HALYARD\* PUREZERO\* HG3 Light Blue Nitrile Gloves

## Surface Resistivity Test (EN 1149-1: 2006) Sample E

#### **Determination of Surface Resistivity**

The surface resistivity of 5 areas across the sample was determined according to the method specified in BS EN 1149-1: 2006

Surface	Surface Resistance ( $\Omega$ )	Surface Resistivity ( $\Omega$ )
Face	5.6 x 10 <sup>11</sup>	1.1 x 10 <sup>13</sup>
Face	5.0 x 10 <sup>11</sup>	9.9 x 10 <sup>12</sup>
Face	5.5 x 10 <sup>11</sup>	1.1 x 10 <sup>13</sup>
Face	5.3 x 10 <sup>11</sup>	1.0 x 10 <sup>13</sup>
Face	5.1 x 10 <sup>11</sup>	1.0 x 10 <sup>13</sup>
Mean	5.3 x 10 <sup>11</sup>	1.0 x 10 <sup>13</sup>
Reverse	7.0 x 10 <sup>11</sup>	1.4 x 10 <sup>13</sup>
Reverse	6.8 x 10 <sup>11</sup>	$1.3 \times 10^{13}$
Reverse	6.7 x 10 <sup>11</sup>	1.3 x 10 <sup>13</sup>
Reverse	6.4 x 10 <sup>11</sup>	1.3 x 10 <sup>13</sup>
Reverse	7.2 x 10 <sup>11</sup>	$1.4 \times 10^{13}$
Mean	$6.8 \times 10^{11}$	1.3 x 10 <sup>13</sup>

Note: The fabric was not subjected to a pre-wash due to being intended for single use only.

#### Induction Decay Test (EN 1149-3: 2004 Method 2)

#### **Determination of Induction Decay Time**

	Shielding Factor (S)	Half Decay Time t <sub>50</sub> (Secs)
1	0.02	6.09
2	0.01	5.57
3	0.00	7.74
Mean	0.00	6.47



Thank you for your interest in Halyard products. If you have any questions or need additional information, please do not hesitate to contact us at <a href="PIQ@hyh.com">PIQ@hyh.com</a> or call us directly at (844) 425-9273.

Sincerely,

Steven Dowdley

Director of Regulatory Affairs Global Products O&M Halyard, Inc. Ryan Solan

Ryan Solan

R&D Senior Engineer Global Research and Development O&M Halyard, Inc.

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This is to certify that: O&M Halyard Inc.

9120 Lockwood Blvd Mechanicsville

Virginia

23116 **USA** 

Holds Certificate Number: CE 725276

In respect of:

**Nitrile Protective Gloves for Personal Protection.** Model CLN9031LG powder free gloves.

on the basis that BSI carried out the relevant Type Examination procedures under the requirements with the Regulation (EU) 2016/425 of the European Parliament and Council relating to Personal Protective Equipment Regulation (PPE) Annex V (Module B) and meets the relevant health and safety requirements specified in Annex II

For and on behalf of BSI, a Notified Body for the above Regulation (Notified Body Number 2797):

Drs. Dave Hagenaars, Managing Director

First Issued: 2020-11-09 Latest Issue: 2020-11-09 Effective Date: 2020-11-09 Expiry Date: 2025-11-09

Page: 1 of 4

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No. CE 725276

**Product Specification** 

Range: Halyard Purezero HG3 Light Blue Nitrile Glove, Non-Sterile, Ambi, (TACKY)

Models: CLN9031XS

CLN9031SM CLN9031MD CLN9031LG CLN9031XL

**Classification:** Protective gloves for use against chemical and micro-organism hazards.

**Description:** A five fingered, ambidextrous, single use powder free, non-sterile, Nitrile with textured

finger surface with tacky grip. Gloves are 310mm in length available coloured Light Blue.

**PPE Category:** Complex

**Product sizes:** XS, S, M, L, XL

**Applicable** The following Harmonized European Standards:

**Standards:** EN 420:2003+A1:2009 Protective gloves. General requirements.

EN ISO 374-1:2016. Protective gloves against dangerous chemicals and microorganisms. Terminology and performance requirements for chemical risks.

EN 374-2:2019. Protective gloves against dangerous chemicals and microorganisms.

Determination of resistance to penetration.

EN 374-4:2019 Determination of resistance to degradation by chemicals.

EN ISO 374-5:2016 Protective gloves against dangerous chemicals and micro-organisms.

Terminology and performance requirements for micro-organism risks.

EN 16523-1:2015. Determination of material resistance to permeation by chemicals.

Permeation by liquid chemical under conditions of continuous contact.

ISO 16604:2004 Clothing for protection against contact with blood and body fluids. Determination of resistance of protective clothing materials to penetration by blood-

borne pathogens.

First Issued: 2020-11-09 Effective Date: 2020-11-09
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No. CE 725276

#### **Product Specification**

#### **Performance**

#### General requirements for gloves to EN 420:2003+A1:2009

Characteristic	Level
Dexterity	5

#### Terminology and performance requirements for micro-organism Risks EN ISO 374-5:2016

Characteristic	Level
Protection against bacteria and fungi	Pass
Protection against viruses	Pass

#### Resistance to chemical permeation to EN ISO 374-1:2016

Tested to the chemicals below to EN 16523-1:2015

#### Resistance to Degradation to chemical protection EN 374-4:2019

Tested to the chemicals below

Chemical	Permeation Level	Mean Degradation %
70% Isopropyl Alcohol	1	78.6
40% Sodium Hydroxide (K)	6	-15.3
50% Sulphuric Acid	6	-20.1
30% Hydrochloric Acid	6	66.6
1% Ethidium Bromide	6	1.9

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No. CE 725276

#### **Certificate Administration Details**

Technical File Reference: No. 012-02 R01 Halyard Non-Sterile Cleanroom Gloves

CLN9031LG, CLN9031XL.

#### **Certificate Amendment Record:**

Issue DateCommentsInternal BSI ProjectNovember 2020First issue models: CLN9031XS, CLN9031SM, CLN9031MD,2797:20:3154555

**Note:** The Certificate holder is responsible for ensuring that the Notified Body is advised of changes to any aspect of the overall processes utilised in the manufacture of the product, failure to do so could invalidate the Certificate in respect of product manufactured following the introduction of such changes.

#### **Monitoring of manufactured PPE:**

The validity of the Certificate is also dependent on the maintenance of the EC quality of production by monitoring system, Module C2, as referenced on BSI Certificate CE 708082.

First Issued: 2020-11-09 Effective Date: 2020-11-09
Latest Issue: 2020-11-09 Expiry Date: 2025-11-09

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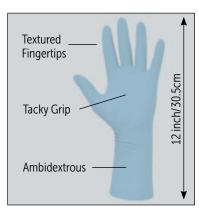
## HALYARD\* PUREZERO\* HG3 Light Blue Nitrile Gloves

For the Cleanroom Environment For Industrial Use Only

## TECHNICAL DATA SHEET

#### Description

HALYARD\* **PURE**ZERO\* HG3 Light Blue Nitrile Cleanroom Gloves are designed for semiconductor, pharmaceutical and medical device manufacturing applications. These gloves are clean processed (washed repeatedly in deionized water) to ensure consistent control of low particles and extractables and are recommended for use in ISO Class 3 or higher and Grade B/C/D cleanrooms. Because HALYARD\* **PURE**ZERO\* Light Blue Nitrile Gloves have an **accelerator-free**¹ formulation, there is a reduced risk of allergies and skin irritation associated with accelerator chemicals in other nitrile gloves.





### **Cleanliness Properties**

<1200 Particles/cm <sup>2</sup>	IEST RP-CC005
Max Level (ug/g)	IEST RP-CC005
50	
35	
5	
20	
5	
10	
10	
7	
5	
	50 35 5 20 5 10 10

### **Physical Properties**

AQL	0.65
Non-Sterile	✓
Ambidextrous	✓
Tacky Grip	✓
Textured Fingertips	✓
Accelerator-Free <sup>1</sup>	✓
Latex-Free	✓
Powder-Free	✓
Silicone-Free	✓
Static Dissipative in Use	✓
Tensile Strength <sup>2</sup>	35 MPa (Target)
Ultimate Elongation <sup>2</sup>	600%
Shelf Life	3 Years

#### **Glove Dimensions**

	X-SMALL	SMALL	MEDIUM	LARGE	X-LARGE
Glove Length (inch/cm)	12"/30.5	12"/30.5	12"/30.5	12"/30.5	12"/30.5
Middle Finger Length (mm)	72	78.9	81.6	88.2	92.1
Width of Palm (mm)	70	80	95	110	120
Finger Tip Thickness	0.10 mm (3.9 mil)				
Palm Thickness	0.08 mm (3.1 mil)				
Cuff Thickness	0.07 mm (2.75 mil)				



## HALYARD\* **PURE**ZERO\* HG3 Light Blue Nitrile Gloves

For the Cleanroom Environment For Industrial Use Only

## TECHNICAL DATA SHEET

#### **Packaging Data**

Double bag, plus case liner

1500 gloves per case: 250 gloves per PE bag X 6 PE bags per lined carton Packaged in ISO Class 5 Cleanroom

#### **Quality & Regulatory Standards**

Compliant to these regulatory standards:

ISO 9001

ISO 13485

ISO 14001

Compliant to these food handling regulatory standards:

FDA 21 CFR 177-2600

FDA 21 CFR 180.22

Commission Regulation (EU) No 10/2011

CE 2797 PPE Category III according to Regulation (EU) 2016/425 EEC

EN 16523-1:2015+A1:2018

EN ISO 374-2:2019

EN ISO 374-4:2019

EN ISO 374-5:2016 Bacteria, Fungi, and Virus Protection

EN ISO 374-1:2016+A1:2018/ Type B

EN ISO 21420:2020 Dexterity Classification: Level 5

Compliant with the REACH regulation

RoHS 2011/65/EU Annex II

Static Dissipative in Use

Tested per ANSI/ ESD SP 15.1

Meets USP <800> Guidelines

**C €** 2797







#### Additional Glove Information

Recommended for use in ISO Class 3 or higher and Grade B/C/D cleanrooms.

Tested against 29 chemicals, 14 chemotherapy drugs and Fentanyl.

Made in Thailand

Declaration of Conformity (DoC) and Certificates of Analysis (COA) for every production lot available online at halyardhealth.com/information

#### **Storage Instructions**

HALYARD\* **PURE**ZERO\* Nitrile Gloves shall be stored in conditions where the product is kept dry (away from moisture), away from direct sunlight, away from sources of heat, and away from radioactive sources.

#### **Ordering Information**

HALYARD\* PUREZERO\* HG3 LIGHT BLUE NITRILE GLOVES, NON-STERILE, AMBIDEXTROUS, TACKY

Size	Code
XS	CLN9031XS
SM	CLN9031SM
MD	CLN9031MD
LG	CLN9031LG
XL	CLN9031XL

For additional information or samples, contact your local distributor or visit www.purezerogloves.com



<sup>1</sup> Not formulated with these commonly used vulcanizing chemicals: Sulfur, Thiurams, Thiaxoles, Guanidines and Carbamates.

<sup>2</sup> Tested per ASTM D412

This fact sheet has been created using the most recent information. In the interest of continuous improvement, the characteristics of the products may change without prior notice.