



# KIMTECH PURE\* G3 White Nitrile Gloves

Engineered for Protection. Designed for Comfort.



DATA PACK

# Vital Process Protection and Comfort of Use

## KIMTECH PURE\* G3 White Nitrile Gloves

**KIMTECH PURE\* G3 White Nitrile Gloves offer a highly advanced protection of processes, helping you to reduce the risk of contamination.**

- Recommended for ISO Class 3 or higher cleanroom environments
- Contain no natural rubber latex reducing the potential for TYPE I glove –associated reactions
- Beaded cuff, for added strength and ease in donning
- Textured fingertip
- Static dissipative in use
- Ambidextrous
- Double-bagged with case liner
- Certificate of Analysis (by Lot) available online
- Trend Data available online to demonstrate product quality over time

Whether there is the need for rigid contamination control in the class ISO 3-4 critical environment or class ISO 5-8 controlled environment, KIMBERLY-CLARK PROFESSIONAL\* provides a complete line of gloves, masks, apparel and wipers to meet these needs.

All KIMBERLY-CLARK PROFESSIONAL\* Products are manufactured to exacting quality standards. Our rigorous process controls ensure every product performs above and beyond the required class or grade for your cleanrooms and clean manufacturing facilities. We continually review our product lines through certification, validation, independent testing and, most importantly, customer satisfaction to ensure your most valuable assets – your processes, your people and your reputation, are protected.

EN374-2:2003



LEVEL 2

EN374-1:2003



0123



## KIMTECH PURE\* G3 White Nitrile Gloves

Formerly SAFESKIN\* Critical Nitrile Gloves

### Product Specifications

- Synthetic nitrile<sup>1</sup> polymer (Acrylonitrile Butadiene)
- Contains no natural rubber latex. Silicone-free

### Quality Standards

- This is a PPE Category III product classified by EC Council Directive 89/686/EEC. It is tested in accordance with the EN Norms EN 420:2003
- Packaged in a Class 100 Cleanroom
- Meets or exceeds AQL level of 1.5 for pinholes
- Manufactured in accordance with Quality System ISO 9001

STATIC DISSIPATIVE  
IN USE

LATEX-FREE

BEADED CUFF

AVAILABLE IN  
30 CM LENGTH



TEXTURED  
FINGERTIPS

<sup>1</sup> Nitrile is a synthetic material exhibiting many of the properties of natural rubber latex while offering other distinct advantages: comfortable fit, resistance to puncturing and abrasion without compromising dexterity or electrostatic dissipative properties.

### PHYSICAL PROPERTIES (Target values)

| Characteristics  | Value                   | Test Method                |
|--|-------------------------|----------------------------|
| Freedom from holes   | 1.5AQL <sup>1</sup>     | ASTM D 5151 and EN 374-2   |
| <small><sup>1</sup> AQL as defined per ISO 2859-1 for sampling by attributes</small> |                         |                            |
| <b>Tensile Properties</b>  | <b>Tensile Strength</b> | <b>Ultimate Elongation</b> |
| - Before Aging   | 24 MPa, nominal         | 600% nominal               |
| - After Accelerated Aging  | 20 MPa, nominal         | 600% nominal               |
| ASTM D 412 and ASTM D 573  |                         |                            |
| <b>Dimensional</b>   | <b>Measured Point</b>   | <b>mm</b>                  |
| - Nominal Thickness  | Middle Finger           | 0.16                       |
|  | Palm                    | 0.13                       |
|  | Cuff                    | 0.10                       |
| ASTM D 3767 and D 6319   |                         |                            |
| <b>Palm Widths</b>   |                         |                            |
| - Nominal Width (mm)   | X-Small                 | Small                      |
|  | 74                      | 84                         |
|  | Medium                  | Large                      |
|  | 96                      | 111                        |
|  | X-Large                 | 123                        |
| ASTM D 3767 and D 6319   |                         |                            |

### KIMTECH PURE\* G3 White Nitrile Gloves

| Size and Code | 30 cm  |
|---------------|--|
|               | 10x             |
| XS            | HC61010  |
| S             | HC61011  |
| M             | HC61012  |
| L             | HC61013  |
| XL            | HC61014  |
|               | 100x <br>= 1000 |

### CLEANLINESS CHARACTERISTICS

| Parameter                        | Limit | Test Method        |
|----------------------------------|-------|--------------------|
| <b>Particles</b>                 |       |                    |
| Per cm <sup>2</sup> ≥ 0.5 micron | 950   | IEST-RP-CC005      |
| <b>Extractables</b>              | µg/g  | µg/cm <sup>2</sup> |
| Sodium (Na+)                     | 10    | 0.07               |
| Ammonium (NH4+)                  | 5     | 0.03               |
| Potassium (K+)                   | 5     | 0.03               |
| Magnesium (Mg2+)                 | 5     | 0.03               |
| Calcium (Ca2+)                   | 45    | 0.30               |
| Chloride (Cl-)                   | 35    | 0.23               |
| Nitrate (NO3-)                   | 15    | 0.10               |
| Sulfate (SO42-)                  | 10    | 0.07               |
| Zinc (Zn2+)                      | 25    | 0.17               |

### INFORMATION SERVICE

For technical enquiries please email [infofax@kcc.com](mailto:infofax@kcc.com)  
For sales enquiries please email [kimtech.support@kcc.com](mailto:kimtech.support@kcc.com)

[www.kcprofessional.com](http://www.kcprofessional.com)

Visit our website and discover a brand new concept in  
cleanroom: the CONTAMINOMICS\* Programme –  
[www.contaminomics.com](http://www.contaminomics.com)





# Kimberly-Clark Corporation

## Declaration of Conformity

|                            |  |      |
|----------------------------|--|------|
| <b>Product:</b>            | KIMTECH* Pure G3 Nitrile   |      |
| <b>Product Codes:</b>      | KC Code  | Size |
|                            | HC61010  | XS   |
|                            | HC61011  | S    |
|                            | HC61012  | M    |
|                            | HC61013  | L    |
|                            | HC61014  | XL   |
| <b>Notified Body:</b>      | TUV Product Service (0123)   |      |
| <b>Classification:</b>     | PPE Class III  |      |
| <b>Applicable Norms:</b>   | Protective Gloves against Chemicals and Micro-Organisms (EN 374-1) |      |
|                            | Protective Gloves against Mechanical Risks (EN 388)                |      |
|                            | General Requirements for Gloves (EN 420)                           |      |
| <b>EEC Representative:</b> | Kimberly-Clark N.V.; Belgicastraat 13; 1930 Zaventem; Belgium      |      |

Kimberly-Clark Corporation, Roswell, GA 30076-2199, USA declares that the new Personal Protective Equipment: Protective Gloves against Chemicals and Micro-Organisms, Model KIMTECH\* Pure G3 Nitrile (Product Codes as aforementioned) is in conformity with the provisions of Council Directive 89/686/EEC and with the harmonized standard EN 420, EN 388 and EN 374-1/3. The device is identical to the Personal Protective Equipment, which is the subject of EC certificate of conformity N° P2 03 04 45160 004 issued by TUV Product Service GmbH, Munich, Germany. This device is subject to the procedure set out in Article 11 point B of Directive 89/686/EEC under the supervision of the Notified Body TUV Product Service, Munich (0123).

### Intended Use:

The Glove shall protect the wearer against mechanical action whose effects are superficial; cleaning materials of weak action and easily reversible effects; risk encountered in the handling of hot components which do not expose the user to a temperature higher than 50 °C; minor impact and vibrations which do not effect vital areas of the body and whose effect cannot cause irreversible lesions; and is **not intended** for prolonged, direct exposure to harsh chemicals than stated.

These gloves are not intended for applications involving direct exposure to harsh chemicals, where heavy-duty industrial gloves are required. Variability in material thickness and glove integrity, chemical concentration, temperature and length of exposure to chemicals will affect specific performance.

This declaration is valid for the above product in its original, unmodified, unopened and undamaged packaging of the smallest unit.

Kimberly-Clark Corporation

Dr. Holger Most  
Regulatory Affairs Europe

Kimberly Clark Corporation; 1400 Holcomb Bridge Road, Roswell, GA 30076-2199, U.S.A.  
Phone: +31 76 5716 497 Fax: +31 84 2220 589





www.kimberlyclark.com  
1-800-251-5400

www.kimberlyclark.com  
+4081 1737 7800

Manufactured by Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

USA: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Canada: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

UK: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

France: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Germany: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Italy: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Spain: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Japan: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

China: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

India: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Australia: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

South Africa: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)

Other countries: Kimberly-Clark Professional, PMS 286, 13075-02, 330 mm(L) x 346 mm(W) x 255 mm(D)



**KIMTECH Pure G3**

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White Nitrile Gloves  
12' Ambidextrous



- ① **White Nitrile Gloves** - 12' (3.66 m) long, 3.46 m wide, 255 mm thick. Ambidextrous design.
- ② **Formally SAFE SKIN CRITICAL** - Meets the requirements of the European Standard EN 455-4:2016 for critical care gloves.
- ③ **Latex Free** - No natural latex rubber, suitable for latex allergic users.
- ④ **Non-Sterile** - Not intended for use in sterile environments.
- ⑤ **Non-Powdered** - Free of talc or other powders.
- ⑥ **Non-Flammable** - Meets the requirements of EN 60959.
- ⑦ **Non-Toxic** - Meets the requirements of EN 60959.
- ⑧ **Non-Irritating** - Meets the requirements of EN 60959.
- ⑨ **Non-Sensitizing** - Meets the requirements of EN 60959.
- ⑩ **Non-Permeable** - Meets the requirements of EN 455-4:2016.
- ⑪ **Non-Adhesive** - Meets the requirements of EN 455-4:2016.
- ⑫ **Non-Disposable** - Intended for multiple uses.
- ⑬ **Non-Reusable** - Intended for single use.
- ⑭ **Non-Recyclable** - Not suitable for recycling.
- ⑮ **Non-Biodegradable** - Not biodegradable.
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10 x 100 = 1000



CE EN455-4:2016



11/19/06  
13075-02  
330 mm(L) x 346 mm(W) x 255 mm(D)  
PMS 286

Dotted Lines indicate placement of Thermal Labels and does not print.  
The label will contain the Code number, Size, Lot number, expiration date, and bar code.



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CE EN455-4:2016

# Test Method for Analyzing Liquid Particle Counts

This test method is used to analyze the mobile particle contaminants from cleanroom gloves.

## 1. Scope

- 1.1. The test method covers the average particulate contamination found on gloves designated for cleanroom applicability.
- 1.2. The average contaminant concentration will be reported in particles per cm<sup>2</sup> in two ways:
  - 1.2.1. By size grouping, 0.5 to 1.0 microns, 1.0 to 2.0 microns, 2.0 to 5.0 microns, 5.0 to 10.0 microns, 10.0 to 20.0 microns, greater than 20.0 microns, and a total particle count greater than 0.5 microns.
  - 1.2.2. Statistical analysis of each grouping consisting of Minimum Value, Maximum Value, Standard Deviation, and Average Value, for each group of individual gloves.
- 1.3. The safe and proper use of gloves is beyond the scope of this test method.
- 1.4. This test method does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this Test Method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 2. Referenced Documents

- 2.1. IEST-RP-CC005.3 Recommended Practice for Gloves and Finger Cots Used in Cleanrooms and Other Controlled Environments
- 2.2. Work Instruction

## 3. Apparatus

- 3.1. Analytical Balance, capable of readability and repeatability to 0.1 mg
- 3.2. Particle Measuring Systems CLS-900 Liquid Particle Counting System
- 3.3. 2000 mL glass beaker or 1000mL glass conical flask
- 3.4. Stainless Steel Forceps, 10" length
- 3.5. 250 ml Volumetric Flask
- 3.6. 500 ml Volumetric Flask
- 3.7. High Purity Deionized Water System, capable of producing 18.2 MOhm quality water
- 3.8. Point of Use Filter, 0.2 micron size
- 3.9. Orbital Shaker, 3/4" orbit, capable of 200 rpm
- 3.10. Circular Die, 1.5 inch diameter, calibrated

## 4. Procedure

### 4.1. Test Preparation

- 4.1.1. Prior to extraction, all Erlenmeyer flasks will be cleaned no less than five times with high purity deionized water filtered to 0.2 microns at point of use.
- 4.1.2. All related equipment (forceps, volumetric flasks, etc.) must be rinsed with high purity deionized water prior to use.

### 4.2. Extraction

- 4.2.1. Randomly pull a glove from the package.
- 4.2.2. Place glove finger-first into the one liter Erlenmeyer flask and hold open by cuff using the rinsed forceps.
- 4.2.3. Empty into the inside of the glove 500 ml high purity filtered deionized water.
- 4.2.4. Allow the glove to settle into the Erlenmeyer flask.
- 4.2.5. Place an additional 250 ml high purity filtered deionized water over the glove within the Erlenmeyer flask.
- 4.2.6. Allow the Erlenmeyer flask with glove to agitate on the shaker for 10 minutes  $\pm$  10 seconds at a rate of 150 rpm  $\pm$  10 rpm.
- 4.2.7. Using clean tongs, immediately remove the glove from the container. Drain any trapped liquid into the beaker by manipulating the fingers on the glove, with the tongs
- 4.2.8. Dispose of the glove.
- 4.2.9. Repeat the extraction two additional times to complete the set.
- 4.2.10. Prepare a process blank, using all the steps in section 4.2, without placing the glove in the Erlenmeyer flask.



#### 4.3. Measurement

4.3.1. Follow the Work Instruction for the Liquid Particle Counter for analyzing the solutions.

#### 4.4. Glove Surface Area

4.4.1. Pull three gloves from the production package and weigh to the nearest 0.1 mg.

4.4.2. Record as A.

4.4.3. Cut the 3 gloves with square die (5X5 cm.) by wheel cutter at palm. This will give you six cut-out sections.

4.4.4. Weight the six cut-out sections. Record this as B.

4.4.5. Calculate the surface area of the glove using the following equation :

$$\frac{A \times 5 \times 5 \times 4}{B}$$

#### 5. Calculations

5.1. Calculate counts/cm<sup>2</sup> by channel size using the following equation:

$$\frac{(\text{Sample (counts/mL)} - \text{Blank (Counts/mL)}) \times \text{Extraction volume (mL)} \times \text{DF}}{\text{Surface area (in cm}^2\text{)}}$$

5.2. Total Counts/cm<sup>2</sup> : =  $\sum$  *AllChannelSizes*

#### 6. Reporting

6.1. The final report should include the Lot Number, Batch number, Product Description, Part Number, and any other pertinent information about the sample, as well as the final calculated counts/cm<sup>2</sup> by channel size and a total counts/cm<sup>2</sup> greater than 0.5 microns.

6.2. Statistics will be calculated and reported on sample sizes greater than three.

## Test Method for Analyzing Extractables

This test method is used to analyze the soluble ionic extractable contaminants from cleanroom gloves.

### 1. Scope

- 1.1. The test method covers the average ionic contamination found on gloves designated for cleanroom applicability.
- 1.2. The average contaminant concentration will be reported in one of two ways:
  - 1.2.1. Micrograms of ionic contaminant per gram of glove weight (ug/g), also described as ppm.
  - 1.2.2. Micrograms of ionic contaminant per square centimeter of glove area (ug/cm<sup>2</sup>)
- 1.3. This test method does not cover contaminants that are insoluble in water, or organic macromolecules.
- 1.4. The safe and proper use of gloves is beyond the scope of this test method.
- 1.5. This test method does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this Test Method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

### 2. Referenced Documents

- 2.1. IEST-RP-CC005.2 Recommended Practice for Gloves and Finger Cots Used in Cleanrooms and Other Controlled Environments.
- 2.2. Work Instruction WI 10-05-26, Work Instruction for Performing Ion Chromatography Analysis of Gloves

### 3. Apparatus

- 3.1. Analytical Balance, capable of readability and repeatability to 0.1 mg
- 3.2. Ion Chromatograph
- 3.3. Extraction Containers, 1 liter capacity, HDPE with screw type lids
- 3.4. Stainless Steel Forceps, 10" length
- 3.5. 500 ml Volumetric Flask
- 3.6. High Purity Deionized Water System, capable of producing 18.0 MOhm quality water
- 3.7. Point of Use Filter, 0.1 micron size
- 3.8. Circular Die, 1.5 inch diameter, calibrated

### 4. Procedure

#### 4.1. Test Preparation

- 4.1.1. Prior to extraction, all extraction containers will be cleaned using high purity deionized water high purity deionized water filtered to 0.2 microns at point of use.
- 4.1.2. All related equipment (forceps, volumetric flasks, etc.) must be rinsed with high purity de-ionized water prior to use.

#### 4.2. Extraction

- 4.2.1. Randomly pull a glove from the package.
- 4.2.2. Place glove finger-first into the one liter Erlenmeyer flask and hold open by cuff using the rinsed forceps.
- 4.3. Empty into the inside of the glove approximately 250 ml high purity filtered deionized water.
- 4.4. Allow the glove to settle into the extraction container.
- 4.5. Pour remaining 250 ml high purity filtered deionized water over the glove within the extraction container.
- 4.6. Place the lid upon the container and seal tightly.
- 4.7. Gently swirl the container to ensure that all surfaces of the glove are wetted.
- 4.8. Allow the glove to extract in the deionized water for at least 10 minutes, but no longer than 11 minutes.
- 4.9. Remove the glove by the fingers, allowing most of the water trapped in the fingers to drain back in to the extraction container.
- 4.10. Dispose of the glove.
- 4.11. Repeat extraction two additional times to complete the set.
- 4.12. Prepare a sample blank, using all the steps in section 2, without placing the glove in the extraction container.

4.13. Measurement

4.13.1. Follow the guidelines for the Ion Chromatograph for analyzing aqueous solutions.

4.14. Glove weight and surface area

4.14.1. Pull three gloves from the production package and weigh to the nearest 0.1 mg.

4.14.2. Record as A.

4.14.3. Cut the 3 gloves with square die (5X5 cm.) by wheel cutter at palm. This will give you six cut-out sections.

4.14.4. Weight the six cut-out sections. Record this as B.

4.14.5. Calculate the surface area of the glove using the following equation :

$$\text{Surface area} = \frac{A \times 5 \times 5 \times 4}{B}$$

5. Calculations

5.1. Once the data output from the Chromatograph has been reviewed for errors, calculate the following:

$$5.1.1. \text{ ug/g (ppm) contamination: } = \frac{(\text{AnalyteConc.}) * (500\text{ml})}{\text{GloveWeight}}$$

$$5.1.2. \text{ ug/cm}^2 \text{ contamination: } = \frac{(\text{AnalyteConc.}) * (500\text{ml})}{\text{SurfaceArea}}$$

6. Reporting

6.1. The final report should include the Lot number, Batch number, Product description, Part number, and any other pertinent information about the sample, as well as the final calculated contaminant concentration in ug/g and ug/cm<sup>2</sup>.