

# Technical Data Sheet

**Article:** 330520 – 330523  
**Model:** Cleanroom Gloves Riverstone Nitrilstat  
**Sizes:** 7/S, 8/M, 9/L, 10/XL  
 For details on product dimensions and weights see below (table)  
**Colour:** White  
**Material:** Nitrile  
**Mat. thickness:** 0.12 mm (approx.)  
**Packaging:** 1000 pieces / carton  
**Subpackaging:** 100 pieces / bag  
 Details of packaging are below mentioned (table)

**Care instructions:**



**PPE-category:** Category III - includes risks that may lead to serious consequences such as death or irreversible damage to health, in accordance with PPE Regulation (EU) 2016/425 (published in the Official Journal of the European Union)

**Standardize:**

EN 420:2003+A1:2009 - Protective gloves - General requirements and test methods

Dexterity Level 5

EN 374:2016 - Protective gloves against dangerous chemicals and micro-organisms (Part 1: Terminology and performance requirements for chemical risks)



Chemical:	EN 374-4:2013	Class
40% Sodium Hydroxide (K)	-14%	6
100% Isopropanol	55%	1

EN 374-5:2016 - Protective gloves against dangerous chemicals and micro-organisms (Part 5: Terminology and performance requirements for micro-organisms risks)



Resistance to bacteria and fungi	passed
Resistance to virus	x

(x = not tested)



**Fittings:**

Nitrile textured fingertips, high quality, powder free, ambidextrous, glove length: approx. 30 cm, material thickness: palm = approx. 0.12 mm; cuff = approx. 0.08 mm; fingertips = approx. 0.16 mm

**Characteristics:**

Comfortable to wear thanks to being manufactured from a flexible, chlorinated and powder-free material. Excellent grip due to the textured fingertips.

**Application:**

Applicable for general work with high risks as well as when handling liquids and chemicals within the specified classification, e.g. in the craft trade, construction sector, chemical industry, pharmaceutical industry, food industry, agricultural sector, facility management, health service, aviation.  
 Particle count (IEST-RP-CC005.2) Count per cm<sup>2</sup> < 400

**Additional information regarding purpose, applications and risk assessment:**

These gloves satisfy the requirements of the quoted standards. Please note that the actual conditions of use cannot be simulated and that the decision on the glove's suitability for its intended purpose therefore lies exclusively with the user. The manufacturer is not responsible for improper use. Hence, an assessment of the residual risk should be performed before use in order to determine whether this glove is suitable for its intended purpose. Kindly note the printed pictograms and performance levels.

**Precautionary measures during use:**

- These gloves must never be immersed in chemical substances or come into contact with chemical substances.
- Only use gloves with a printed chemical pictogram when handling chemicals.
- Make certain that the selected glove is resistant to the chemicals being used.
- Do not use these gloves to protect against serrated edges or blades, etc.
- If gloves must be used in a hot environment, make certain that they satisfy the requirements of EN 407 and that they were tested as specified therein.
- Do not use the gloves close to moving machine parts.
- Check the gloves carefully before use to make certain there are no defects or imperfections.

- It is reasonable to assume that the gloves also protect against sharp objects such as injection needles, provided they satisfy the requirements of perforation resistance according to EN 388:2016.
- Discard damaged, worn, dirty or soiled gloves, irrespective of the substance (including on the inside), as they may lead to skin irritation and rashes. Consult a doctor or dermatologist should such cases arise.

#### EN 420:2003+A1:2009 - General requirements and test methods for gloves

##### WARNING:

**The overall classification for gloves with two or more layers does not necessarily indicate the performance of the outermost layer. Gloves with mechanical resistance that achieve and demonstrate Level 1 tear resistance (C) or higher must not be worn if there is a risk of them catching when operating machines with moving parts. The tests refer to the palm of the gloves.**

##### Protective gloves against dangerous chemicals and micro-organisms:

EN ISO 374-1:2016, Part 1:	Terminology and performance requirements for chemical risks
EN 374-2:2014, Part 2:	Determination of resistance to penetration
EN 374-4:2013, Part 4:	Determination of resistance to degradation by chemicals
EN ISO 374-5:2016, Part 5:	Terminology and performance requirements for risks by micro-organisms
EN 16523-1:2015, Part 1:	Determination of material resistance to permeation by chemicals – Part 1 Permeation by liquid chemicals under conditions of continuous contact

##### Definition of terms:

Degradation:	An adverse change in one or more properties of a material used in a protective glove due to contact with a chemical. NB: Examples of degradation include flaking, swelling, disintegration, embrittlement, discolouration, a change in appearance, hardening or softening etc.
Penetration:	Movement of a chemical through materials, seams, pinholes or other imperfections in the protective glove material at a nonmolecular level.
Permeation:	Movement process of a chemical through the material of the protective glove material at a molecular level. NB: Permeation includes the following: Absorption of molecules of the chemical into the contacted (outside) surface of a material; Diffusion of the absorbed molecules in the material; Desorption of the molecules from the opposite (inside) surface of the material.

##### Terminology and performance requirements for micro-organisms risks EN ISO 374-5:2016:

Article	Result article Riverstone Nitrilstat
Resistance to Bacteria & Fungi	passed
Resistance to Virus	not tested

##### Resistance to penetration EN 374-2:2014 Acceptable quality limit (AQL):

Performance level	Acceptable quality limit (AQL)	Inspection level	Article Riverstone Nitrilstat
3	< 0.65	G1	
2	< 1.50	G1	AQL = 1.5
1	< 4.00	S4	

##### Resistance to penetration EN 374-2:2014 Acceptable quality limit (AQL):

Code letter	Test chemical	CAS-RN	Class	Article Riverstone Nitrilstat
K	Sodium Hydroxide 40% NaOH	1310-73-2	Inorganic alkali	no change, -14%

##### Resistance to degradation by chemicals EN 374-4

Chemical	NaOH 40%	Isopropanol
DR1	-9%	65%
DR2	-19%	51%
DR3	-14%	50%
DR	-14%	55%
SD	2.5%	8%

**Material resistance to permeation by chemicals EN ISO 374-1:2016:**

Breakthrough time (min.)	Performance level for permeation
>10	1
> 30	2
> 60	3
> 120	4
> 240	5
> 480	6

**Protective gloves against chemicals are classified in three types, based on their permeation performance:**

- Type A: The permeation performance must satisfy at least Level 2 for no less than six test chemicals according to the following table:
- Type B: The permeation performance must satisfy at least Level 2 for no less than three test chemicals according to the following table:
- Type C: The permeation performance must satisfy at least Level 1 for no less than one test chemical according to the following table:

**List of test chemicals:**

Code letter	Test chemical	CAS-RN	Class	Breakthrough time (min.) Riverstone Nitrilstat	Level Riverstone Nitrilstat
A	Methanol	67-56-1	Primary alcohol		
B	Acetone	67-64-1	Ketone		
C	Acetonitril	75-05-8	Nitrile		
D	Dichloromethane	75-09-2	Chlorinated hydrocarbon		
E	Carbon sulphide	75-15-0	Sulphur-containing organic compound		
F	Toluene	108-88-3	Aromatic hydrocarbon		
G	Diethylamine	109-89-7	Amine		
H	Tetrahydrofuran	109-99-9	Heterocyclic and ether compounds		
I	Ethyl acetate	141-78-6	Ester		
J	n-heptane	142-82-5	Aliphatic hydrocarbons		
K	Sodium hydroxide 40%	1310-73-2	Inorganic alkali	> 480	6
L	Sulphuric acid 96%	7664-93-9	Inorganic acid, oxidizing		
M	Nitric acid 65%	7697-37-2	Inorganic acid, oxidizing		
N	Acetic acid 99%	64-19-7	Organic acid		
O	Ammonia water 25%	1336-21-6	Organic alkali		
P	Hydrogen peroxide 30%	7722-84-1	Peroxide		
S	Hydrofluoric acid 40%	7664-39-3	Inorganic acid		
T	Formaldehyde 37%	50-00-0	Aldehyde		

**Additional chemicals:**

Code letter	Test chemical	CAS-RN	Class	Breakthrough time (min.) Riverstone Nitrilstat	Level Riverstone Nitrilstat
	Isopropanol 100%	67-63-0	Alcohol	17	1

**Marking of the glove:**

Type C: The tested chemical must be identified by their code letter, positioned below the pictogram as shown below. If chemicals not included in the list are also tested, information on the performance levels must be made available in the user instructions.

**EN ISO 374-1:2016/Type C**


**WARNINGS:**

- This information does not reflect the actual duration of protection at the workplace; it also does not distinguish between blends and pure chemicals.
- The resistance to chemicals was assessed using samples taken only from the palm and tested under laboratory conditions (apart from the glove measures 400 mm or longer, in which case the cuff is also tested); the stated resistance refers only to the tested chemicals. Resistance may differ if the chemical is present in a blend.
- Users are recommended to check whether the glove is suitable for its intended application, as the conditions at the workplace may differ from those during type testing, depending on the temperature, abrasion and degradation.
- Protective gloves that have already been used may provide less resistance to dangerous chemicals due to changes in their physical properties. The actual service life may be reduced significantly due to degradation, movement, stringing, abrasion and suchlike, caused by contact with chemicals. Degradation may be the most significant factor in regard to aggressive chemicals; this must be duly considered in the selection of protective gloves against chemicals.
- The gloves must always be checked for imperfections before use.
- Gloves are for single-use only.

**Protection against micro-organisms (bacteria and fungi) according to EN ISO 374-5:2016:**

Marking of gloves that protect against bacteria and fungi:

**ISO 374-5:2016**

**Marking of gloves that protect against viruses, bacteria and fungi:**

The bacteriophage penetration test according to ISO 16604:2004 (method B) must be performed and passed if a protection against viruses be stated.

**ISO 374-5:2016**

**WARNING:**

**Resistance to penetration was assessed under laboratory conditions and refers exclusively to the tested samples.**

**Markings on the bags / carton:**

Trademark, art.-no. of manufacturer, size, CE-icon, at foodstuff suitability: glass and fork symbol, pictograms with the corresponding numbers of the relevant European PPE standards, i-mark, factory icon with date of manufacture: month/year, address of manufacturer

**Nitrilstat**

330520 – 330523 Brand label of manufacturer  
Article no. of the manufacturer  
10/XL Size of gloves (example)



The CE marking confirms compliance with the requirements of European Regulation 2016/425.



i mark: Reference to the manufacturer's information.



Pictograms with the corresponding numbers of the relevant European PPE standards (example, detailed pictogram see previous pages).

Mfg. Date MM/YYYY

Date of manufacture month/year: 00/0000

Protect2Clean GmbH  
Erzberg 5 · 38126 Braunschweig · Germany

Address of manufacturer

**Dimensions/weights article:**

Size	Total length in cm	Palm width in cm	Weight per piece in g
7/S	30	8.5	6.5
8/M	30	9.5	7.1
9/L	30	10.5	7.6
10/XL	30	11.5	7.9

The above values are approximate and subject to slight variations.

**Details of packaging unit:**

Size	kg net	Length in cm	Width in cm	Height in cm
7/S	7.3	35.5	30	23.5
8/M	7.9	35.5	30	23.5
9/L	8.2	35.5	30	23.5
10/XL	9	35.5	30	23.5

The above values are approximate and subject to slight variations.

**Quality Management:**

- Certified QM-system according to ISO 9001
- Receiving inspections are performed in regards to certified products by random samples: Sizes, color, weight, surface and volume resistivity (only ESD gloves)
- Certified products are only tested and approved by trained and authorized personnel
- The procedures used in the manufacturing process are regularly monitored and the related documents verified
- All test results are documented and reported to the upper management if necessary

**Hazardous ingredients - REACH (Registration, Evaluation, Authorization and Restriction of Chemicals):**

The product is manufactured in compliance with Annex XVII of the European REACH regulation 1907/2006 and contains no hazardous substances in concentrations requiring declaration.

**Declaration of Conformity:**


These gloves are classified as personal protective equipment (PPE). The CE mark confirms that the product satisfies the applicable requirements of Regulation (EU) 2016/425.

**Identification and selection:**

Selection of gloves must be made according to workplace requirements, type of hazard and relevant environmental conditions. The employer is responsible for choosing the right PSA. Therefore, it is necessary to check the suitability of the gloves for the needs needed before use.

**Regulation for use:**

The gloves fulfil the safety requirements only if they are worn in an entirely correct manner and in their best condition. Check the gloves for defects or flaws before use. If any tears or holes appear during use of the gloves, they must be disposed of immediately. Make sure that the gloves are not too large or too small and fit exactly. Modifications to this PPE are not permitted. Follow the instructions provided in the manufacturer's information and keep this information in a safe place during the entire service life of the PPE. We assume no responsibility for any damages and/or consequences resulting from improper use.

**Care Instructions:**


Do not wash and bleach the gloves. Drying in tumbler is not possible. Do not iron. Professional dry and wet cleaning is not allowed.

Both new and used gloves must be checked carefully for any damage before they are worn. Never store dirty gloves if they are intended for reuse. Users are advised to carefully remove the gloves on the right and then the left if it is not possible to remove the soiling or if doing so would present a danger. Here, use the hand wearing the glove in such a way that the other glove can be removed without coming into contact with the soiling.

**Storage and aging:**

The gloves should be stored in their original packaging in a dark, cool and dry place, away from direct sunlight and away from any sources of heat. Prolonged contact with direct sunlight or excessive heat will shorten the service life. Avoid any contact of the product with solvents which could result in changes to the product or its properties. The shelf life is generally up to 3 years when stored properly. The bag and boxes are marked with the production date (month/year), named "Mfg. Date:".

**Disposal:**

Used gloves may be contaminated with environmentally harmful or hazardous substances. Dispose of the gloves in accordance with applicable local laws.

**Health risks:**

Allergies, caused by the proper use of the gloves, are not yet known. If an allergic reaction still occurs, consult a doctor or dermatologist.

**Essential health and safety requirements:**

- 5 finger glove adapted to the ergonomics of the hand
- The tactile sensitivity is enhanced by high dexterity
- The different hand sizes are considered by the available sizes (please see above)
- Protection levels and protection classes: The protective performance refers to the palm of the hand; impair the wearing of PPE and the performance of the intended activities
- The gloves are tested for harmlessness of the materials
- No materials known to cause allergies, excessive irritation or injury have been used

**First Aid:**

**Remove the gloves if they are contaminated with hazardous materials.**

**In case of contact with skin: immediately consult a doctor if an allergic reaction occurs.**

**In case of eye contact: wash out the affected eye with water. Consult a doctor immediately.**

**The notified body responsible for the EU Type Examination and that monitors the manufacturer's quality assurance based on the production process (module D, in accordance with Annex VIII of PPE regulation (EU) 2016/425):**

TÜV Rheinland LGA Products GmbH  
Tillystraße 2  
D-90431 Nürnberg  
(Identification No.: 0197)

For the full Declaration of Conformity and manufacturer's information, please visit:  
[www.protect2clean.com](http://www.protect2clean.com)

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