












Technical Data Sheet

<p>Article: 2403 </p> <p>Model: Knitted gloves ESD 1</p> <p>Sizes: XS, S, M, L, XL</p> <p><small>For details on product dimensions and weights see below (table).</small></p> <p>Colour: grey/white</p> <p>Material: Main material: nylon, carbon, elastic yarn Coating: Polyurethane (PU)</p> <p>Packaging: 240 pairs / carton</p> <p>Subpackaging: 12 pair, bundled</p> <p><small>Details of packaging are below mentioned (table)</small></p> <p>Care instructions:</p> <p></p> <p>PPE-category: Category II - includes mean risks not listed under Cat. I or III, according to Regulation (EU) 2016/425, Annex I (published in the Official Journal of the European Union)</p> <p>Standardize: <u>EN ISO 21420:2020 - Protective gloves - General requirements and test methods</u> <u>EN 388:2016+A1:2018 - Protective gloves against mechanical risks</u></p> <table border="0"> <tr> <td></td> <td>Abrasion resistance</td> <td>1</td> </tr> <tr> <td></td> <td>Cut resistance (Coupe test)</td> <td>1</td> </tr> <tr> <td></td> <td>Tear resistance</td> <td>4</td> </tr> <tr> <td></td> <td>Puncture resistance</td> <td>X</td> </tr> <tr> <td></td> <td>Cut resistance (TDM) according to EN ISO 13997:1999</td> <td>X</td> </tr> </table> <p><u>DIN EN 16350:2014 - Electrostatically dissipative</u></p> <table border="0"> <tr> <td></td> <td>Protective gloves - Electrostatic properties (The contact resistance of all glove parts (measured according to DIN EN 1149-2) is less than $1 \times 10^8 \Omega$.)</td> </tr> </table> <p><u>EN 13594:2015 - Impact protection</u></p> <p>Test result: X</p> <p><small>(X = not tested)</small></p>		Abrasion resistance	1		Cut resistance (Coupe test)	1		Tear resistance	4		Puncture resistance	X		Cut resistance (TDM) according to EN ISO 13997:1999	X		Protective gloves - Electrostatic properties (The contact resistance of all glove parts (measured according to DIN EN 1149-2) is less than $1 \times 10^8 \Omega$.)	 <p><small>© BIG Arbeitsschutz GmbH</small></p>
	Abrasion resistance	1																
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Fittings:

Carbon/nylon/elastane blend fabric, polyurethane (PU) coated fingertips, white, knitted cuff

Characteristics:

Comfortable to wear thanks to being manufactured from a single thread, no abrasive seams. Highly flexible and an excellent fit, highly elastic, therefore highly dexterous. Electrostatically conductive in accordance with DIN EN 16350:2014.

Application:

Applicable for work with high dexterity and low risks, electrostatically conductive in accordance with DIN EN 16350:2014, measured based on DIN EN 1149-2, e.g. in the craft trade, construction sector, utilities industry

Additional information regarding purpose, applications and risk assessment:

These product satisfy the requirements of the quoted standards. Please note that the actual conditions of use cannot be simulated and that the decision on the product'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 product 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 forearm-protection with a printed chemical pictogram when handling chemicals.
- Make certain that the selected forearm-protection is resistant to the chemicals being used.
- Do not use these forearm-protection to protect against serrated edges or blades, etc.
- If forearm-protection 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 forearm-protection 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 forearm-protection also protect against sharp objects such as injection needles, provided they satisfy the requirements of perforation resistance according to EN 388:2016+A1:2018.
- Discard damaged, worn, dirty or soiled forearm-protection, 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 ISO 21420:2020 - Protective gloves - General requirements and test methods:

This standard specifies the relevant test methods to be used for all protective gloves and the general requirements for design principles, glove assembly, resistance of the glove material to water penetration, harmlessness, comfort and performance as well as the labeling to be carried out by the manufacturer and the information to be provided by the manufacturer.

EN 388:2016+A1:2018 - Protective gloves against mechanical risks:

Protective gloves against mechanical risks must achieve at least Level 1 or Level A in at least one of the properties (abrasion, cut, tear and puncture resistance) of the TDM cut resistance test according to EN ISO 13997:1999.

- Abrasion resistance: The number of cycles needed to wear through the test glove.
- Cut resistance: The number of text cycles in which the sample is cut through at constant speed.
- Tear resistance: The force needed to continue tearing the cut sample.
- Puncture resistance: The force needed to puncture the sample using a standardized test stylus.

EN 388:2016+A1:2018



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Test criteria	Rating	Article 2403
A = Abrasion resistance	0 - 4	1
B = Cut resistance (Coupe test)	0 - 5	1
C = Tear resistance	0 - 4	4
D = Puncture resistance	0 - 4	X
E = Cut resistance (TDM) according to EN ISO 13997:1999	A - F	X
F = Impact protection test according to EN 13594:2015	P	X

The higher the test number, the better the test performance. X means 'not tested'. P means 'passed'.

Test	1	2	3	4	5
A = Abrasion resistance (number of abrasion cycles)	100	500	2000	8000	-
B = Cut resistance (index) Coupe test	1,2	2,5	5,0	10,0	20,0
C = Tear resistance (N)	10	25	50	75	-
D = Puncture resistance (N)	20	60	100	150	-

Test	A	B	C	D	E	F
E = Cut resistance according to EN ISO 13997:1999 (N)	2	5	10	15	22	30
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EN 13594:2015 - Impact protection:

Every area specified as providing protection against impact must be tested. The test method (dimensions of the test sample) does not permit impact testing of the finger protection. Gloves to protect against mechanical risks may be designed and manufactured in such a way that they offer specific impact damping (e.g. impact protection on the knuckles, the back of the hand, the palms). These gloves must satisfy the requirements of Level 1 according to EN 13594:2015.

The results of the Coupe test must only be taken as indications if blunting occurs during the cut resistance test (B), while the TDM cut resistance test (E) provides reference results in regard to performance.

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.



DIN EN 16350:2014 - Protective Gloves - Electrostatic properties:

DIN EN 16350:2014 "Protective gloves - Electrostatic properties" states that protective gloves must be classified as conductive if the contact resistance of all glove parts (measured according to DIN EN 1149-2) is less than $1,0 \times 10^8 \Omega$ (100 MΩ) ohms. These gloves satisfy the requirements of DIN EN 16350:2014.

Results and conditions of the contact resistance test to DIN EN 16350:2014:

	Mean value	Single value
Palm	0,157 MΩ	0,131 MΩ; 0,208 MΩ; 0,198 MΩ; 0,0997 MΩ; 0,147 MΩ
Back of Hand	0,009 MΩ	0,00978 MΩ; 0,00932 MΩ; 0,0103 MΩ; 0,00813 MΩ; 0,00759 MΩ
Cuff	0,014 MΩ	0,00975 MΩ; 0,0246 MΩ; 0,00991 MΩ; 0,0109 MΩ; 0,0134 MΩ

Conditioning: 23°C / 25% rel. humidity | Conditioning time: ≥48 h | Measurements: EN1149-2 with 100V for palm, EN1149-2 with 10V for back, IEC 61340-2-3 probe for cuff with 10V

WARNING:







A person wearing conductive protective gloves must be properly grounded, e.g. by wearing suitable footwear. Conductive gloves must not be unpacked, opened, adjusted or removed in combustible or explosive atmospheres or when handling combustible or explosive substances. The electrostatic properties of the protective gloves may be negatively influenced by aging processes, contamination and damage; additional ratings are required for oxygen-enriched, combustible atmospheres, and the gloves may not be suitable in these cases.

Purpose, applications and risk assessment:

Applicable for work with high dexterity and low risks, electrostatically conductive in accordance with DIN EN 16350:2014, measured based on DIN EN 1149-2, e.g. in the craft trade, construction sector, utilities industry

Markings on the gloves:

Trademark, art.-no. of manufacturer, size, CE-icon, pictograms with the corresponding numbers of the relevant European PPE standards, i-mark, factory icon with date of manufacture: month/year, hourglass pictogram with expiry date: month/year

-  Brand label of manufacturer
- 2403 Article no. of the manufacturer
- 10 Size of gloves according to EN ISO 21420:2020 (example)
-  Pictograms with the corresponding numbers of the relevant European PPE standards (example, detailed pictogram see previous pages).
-  The CE marking confirms compliance with the requirements of European Regulation 2016/425.
-  i mark: Reference to the manufacturer's information.
-  Date of manufacture month/year: 00/0000
-  Expiry date month/year: 00/0000

Dimensions/weights article:

Size	Length in cm	Width in cm	Height in cm	Weight in g/pair
XS	25	13	0,2	22
S	25	13	0,2	23
M	26	13	0,2	25
L	26	13	0,2	28
XL	26	13	0,2	28

The above values are approximate and subject to slight variations.

Details of packaging unit:



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Size	kg gross	kg net	Length in cm	Width in cm	Height in cm
XS	6,20	4,70	58	28	40
S	6,70	5,20	58	28	40
M	6,70	5,20	58	28	40
L	7,40	5,90	58	28	40
XL	7,90	6,40	58	28	40

The above values are approximate and subject to slight variations.

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

CE These products 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 model 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 product for the needs needed before use.

Regulation for use:

The product fulfil the safety requirements only if they are worn in an entirely correct manner and in their best condition. Check the product for defects or flaws before use. If any tears or holes appear during use of the product, they must be disposed of immediately. Make sure that the product 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 the gloves and do not bleach. 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 product 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 service life is generally up to 5 years when used and stored properly (see also expiry date on the packaging). The product are also marked with the production date (month/year).

Disposal:

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

Health risks:

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

First Aid:

Remove the product 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:

CTC
Parc Scientifique Tony Garnier
4 rue Hermann Frenkel
69367 Lyon Cedex 07
France
Notified Body No.: 0075

**For the full Declaration of Conformity and manufacturer's information, please visit:
www.big-arbeitsschutz.de**



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