


Manufacturer's Information

pursuant to Regulation (EU) 2016/425, Appendix II, Section 1.4. (Published in the Official Journal of the European Union)






Please read carefully before using! You are required to enclose this information leaflet when passing on the personal protective equipment, or to present it personally to the recipient. You may therefore reproduce this leaflet at your own discretion.

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.

A. Markings on the gloves:

Trademark, model no., size, CE icon, testing institute identification number, pictograms, i-mark, factory icon with month/year of manufacture

	Brand label of manufacturer
2161	Article no. of the manufacturer
10	Size (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.
0598	Four-digit number of the testing institute, which monitors the quality assurance of the manufacturer. This will be attached to the CE mark on the product.
	i mark: Reference to the manufacturer's information.
	Date of manufacture month/year: 00/0000

B. Explanation and numbers of the standards whose requirements the gloves satisfy:

Standards retrieved from: the Official Journal of the European Union. Available from Beuth Verlag GmbH, 10787 Berlin, www.beuth.de.


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

EN 388:2016 - Protective gloves against mechanical risks:

Protective gloves against mechanical risks must achieve at least Level 1 for at least one of the properties (abrasion, cut, tear and puncture resistance) or at least Level A 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

	Test criteria	Rating	Article 2161
	A = Abrasion resistance	0 - 4	4
	B = Cut resistance (Coupe test)	0 - 5	2
	C = Tear resistance	0 - 4	4
	D = Puncture resistance	0 - 4	2
	E = Cut resistance (TDM) according to EN ISO 13997:1999	A - F	C
	F = Impact protection test according to EN 13594:2015	P	not assessed

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
Article 2161			10			

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. Tests are taken from the palm area of the glove.

EN 511:2006 - Protective gloves against cold:

EN 511:2006



X21

Test criteria	Possible performance levels	Article 2161
Convective cold (table 1)	0 - 4	X
Contact cold (table 2)	0 - 4	2
Water penetration	0 - 1	1

Table 1 - Thermal insulation values:

Performance level	Thermal insulation ITR in m ² K/W
1	$0,10 \leq ITR < 0,15$
2	$0,15 \leq ITR < 0,22$
3	$0,22 \leq ITR < 0,30$
4	$0,30 \leq ITR$

Table 2 - Thermal resistance values:

Performance level	Thermal resistance ITR in m ² K/W
1	$0,025 \leq R < 0,050$
2	$0,050 \leq R < 0,100$
3	$0,100 \leq R < 0,150$
4	$0,150 \leq R$

The higher the test number, the higher the test performance. The code 'X' in place of a number indicates that the glove was not designed for applications covered by this test. Gloves in Levels 2 to 4 for convective cold and contact cold must achieve at least Level 2 for abrasion resistance and tear resistance according to EN 388:2016; the highest level for convective cold and contact cold must otherwise be given as Level 1. The levels and their protective effects only apply to the complete assembly for gloves that consist of several parts.

WARNING:

Gloves that do not do not fulfil the criteria of Level 1 for water penetration may lose their insulating properties when exposed to damp.

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 non-molecular 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 2161
Resistance to Bacteria & Fungi	passed
Resistance to Virus	not assessed

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

Performance level	Acceptable quality limit (AQL)	Inspection level	Article 2161
3	< 0,65	G1	
2	< 1,50	G1	AQL = 1,50
1	< 4,00	S4	

Resistance to degradation EN 374-4:2013:

Code letter	Test chemical	CAS-RN	Class	Article 2161
K	Sodium hydroxide 40%	1310-73-2	Inorganic alkaliBase	no change, 7.2%
L	Sulphuric acid 96%	7664-93-9	Inorganic acid, oxidizing	swelling and discoloration, 17.2%
M	Nitric acid 65%	7697-37-2	Inorganic acid, oxidizing	discoloration, 50.1%
P	Hydrogen peroxide 30%	7722-84-1	Peroxide	no change, 1.7%
T	Formaldehyde 37%	50-00-0	Aldehyde	no change, 2.7%

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.) art. 2161	Level art. 2161
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		3
M	Nitric acid 65%	7697-37-2	Inorganic acid, oxidizing	> 60	3
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	> 480	6
S	Hydrofluoric acid 40%	7664-39-3	Inorganic acid		
T	Formaldehyde 37%	50-00-0	Aldehyde	> 480	6

Marking of the glove:

Type B:

The three tested chemicals 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 B



KLMPPT

WARNINGS:

This information does not provide any details on the actual duration of protection at the workplace; it also does not distinguish between blends and pure chemicals. 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.

When used, protective gloves may provide less resistance to the dangerous chemical due to changes in physical properties. Movements, snagging, rubbing, degradation caused by the chemical contact etc. may reduce the actual use time significantly. For corrosive chemicals degradation can be the most important factor to consider in selection of chemical resistant gloves.

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.

EN 374-4:2013 Degradation levels indicate the change in puncture resistance of the gloves after exposure to the challenge chemical.

When used, protective gloves may provide less resistance to the dangerous chemical due to changes in physical properties. Movements, snagging, rubbing, degradation caused by the chemical contact etc. may reduce the actual use time significantly. For corrosive chemicals degradation can be the most important factor to consider in selection of chemical resistant gloves.

The gloves must always be checked for imperfections before use.

The manufacturer must provide decontamination instructions for reusable gloves. Gloves are for single-use only if they do not include decontamination instructions, and the following warning must be added: To be used only once.

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

Marking of gloves that protect against bacteria and fungi:

EN ISO 374-5:2016



WARNINGS:

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

Not tested against viruses. (this warning must be added if a test against viruses was not performed)

C. Purpose, applications and risk assessment:

Applicable for general work with high risks in humid environments, medium cut protection requirements as well as when handling liquids, e.g. in the craft trade, construction sector, chemical industry, pharmaceutical industry, food industry, fish industry, agricultural sector, facility management

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:

- 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 for heat application are requested, make certain that they satisfy the requirements of EN 407:2020 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.
- Gloves meeting the requirement for resistance to puncture in accordance with EN388:2016+A1:2018 may not be suitable for protection against sharply pointed objects such as hypodermic needles.

- 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.
- For further information regarding the permissible user exposure, e.g. temperature, duration please contact the manufacturer.

D. Cleaning, care and disinfecting:

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.

E. Storage and ageing:

Keep in a cool, dry place; do not expose to direct sunlight; keep away from any ignition sources; store in the original packaging if possible. The mechanical properties of the gloves will not change for a period of up to 3 years from the manufacturing date, provided they are stored as recommended. A precise service life cannot be stated, as it depends on the type of use and on whether the user ensures that the gloves are used exclusively for their intended purpose. The manufacturing date (month/year) is stated on the gloves.

F. Disposal:

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

G. Material composition:

Carrier material: nylon/acrylic

Coating: PVC (double dipped)

inner lining: acrylic/wool

H. Packaging:

This item will be delivered in a uniform cardboard box with a content of: 60 pair

The smallest sales unit is: 6 pair

I. Health risks:

There have been no reported incidents of allergies provoked by use of the gloves for their intended purpose. You should nonetheless consult a doctor or dermatologist if you experience an allergic reaction.

Notified body responsible for the EU Type Examination:

SATRA Technology Europe Ltd.

Bracetown Business Park

Clonee, Dublin D15 YN2P

Ireland

Notified Body No.: 2777

in accordance with EU Regulation 2016/425.

Notified body 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):

SGS Fimko Oy

Takomotie 8,

FI-00380 Helsinki,

Finland

Notified Body number: 0598

Manufacturer's name and address:

BIG Arbeitsschutz GmbH, Königsberger Str. 6, 21244 Buchholz/Nordheide, Germany

For the full Declaration of Conformity and additional technical information, please visit:

www.big-arbeitsschutz.de

