

EN ISO 374-1:2016

This standard specifies the capability of gloves to protect the user against chemicals and micro-organisms.

Standard EN ISO 374-1: 2016


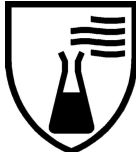



Protective gloves against chemicals

It is based on three methods:

- Penetration test in accordance with standard EN374-2: 2014
- Permeation test in accordance with standard EN16523-1: 2015 which replaces standard EN374-3
- Degradation test in accordance with standard EN374-4: 2013

The 'Chemical resistant' gloves classified as Type A, B or C

EN ISO 374-1:2016/Type A  J K L M N O	EN ISO 374-1:2016/Type B  J K L	EN ISO 374-1:2016/Type C  J K L
<p>Glove Type A:</p> <p>* Penetration resistance (EN 374-2)</p> <p>* The permeation performance shall be at least level 2 (minimum 30 mins breakthrough time) against a minimum of 6 test chemicals listed in the table below (EN16523-1)</p>	<p>Glove Type B:</p> <p>* Penetration resistance (EN 374-2)</p> <p>* The permeation performance shall be at least level 2 (minimum 30 mins breakthrough time) against a minimum of 3 test chemicals listed in the table below (EN16523-1)</p>	<p>Glove Type C:</p> <p>* Penetration resistance (EN 374-2)</p> <p>* The permeation performance shall be at least level 1 (minimum 10 mins breakthrough time) against a minimum of 1 test chemical listed in the table below (EN16523-1)</p>

Code	Chemical	CAS Number	Class
A	Methanol	67-56-1	Primary alcohol
B	Acetone	67-64-1	Ketone
C	Acetonitrile	75-05-8	Nitrile compound
D	Dichloromethane	75-09-2	Chlorinated paraffin
E	Carbon disulphide	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 compound
I	Ethyl acetate	141-78-6	Ether
J	n-Heptane	142-85-5	Saturated Hydrocarbon
K	Sodium hydroxide 40%	1310-73-2	Inorganic base
L	Sulphuric acid 96%	7664-93-9	Inorganic mineral acid
M	Nitric acid 65%	7697-37-2	Inorganic mineral acid
N	Acetic acid 99%	64-19-7	Organic acid
O	Ammonium hydroxide 25%	1336-21-6	Organic base
P	Hydrogen peroxide 30%	7722-84-1	Peroxide
S	Hydrofluoric acid 40%	7664-39-3	Inorganic mineral acid
T	Formaldehyde 37%	50-00-0	Aldehyde

Each chemical tested is classified in terms of breakthrough time (performance level 0 to 6):

Measured breakthrough time	Protection index	Measured breakthrough time	Protection index
> 10 minutes	Class 1	> 120 minutes	Class 4
> 30 minutes	Class 2	> 240 minutes	Class 5
> 60 minutes	Class 3	> 480 minutes	Class 6

- **Degradation test (deterioration of the physical properties of the glove in contact with the chemical) in accordance with EN 374-4: 2013**



To be able to claim protection against a chemical of the list, permeation and from now degradation tests must be carried out. The results of the degradation test must appear in the information leaflet.

Standard EN ISO 374-5: 2016



Protective gloves against micro-organisms

Gloves must pass the penetration resistance test in accordance with standard EN 374-2: 2014. **The possibility of claiming protection against viruses was added, if the glove passes ISO 16604: 2004 (method B) test.**

<p>EN ISO 374-5</p> 	<p>For gloves offering protection against bacteria and fungi.</p>	<p>EN ISO 374-5</p>  <p>VIRUS</p>	<p>For gloves protecting against bacteria, fungi and viruses.</p>
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