

well **INFORMED**
well **PROTECTED**
well **AHEAD**



EN ISO 374



UVWXYZ

**EN REGULATIONS FOR DANGEROUS CHEMICALS
AND MICRO-ORGANISMS ARE CHANGING.
LET ANSELL BE YOUR GUIDE.**

The new EN374 chemical and micro-organism protection guidelines have updated directives that were over 10 years old. Ansell is developing a series of materials to help explain what elements in the standard have changed, why it matters, and what compliance will require.

➤ Stay informed. Visit the Ansell EN Standards resource center www.ansell.com/enresourcecenter

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EN374 STANDARD: 2016 CHANGES

Official EN ISO 374:2016 standard to be published upon official availability.

Changes at a Glance

The new EN ISO 374 standard refines the required capabilities for gloves that protect workers whose hands are subject to chemical and/or micro-organism exposure. This summary highlights changes to the EN374 standard. The requirements are described in more detail in the Ansell EN Guide available at:

www.ansell.com/enresourcecenter

NEW NOMENCLATURE

old

EN374: 2003

Gloves giving protection from chemicals and micro-organisms.

new

EN ISO 374: 2016*

Gloves giving protection from dangerous chemicals and micro-organisms.

*Official EN ISO 374:2016 standard to be published upon official availability.

NEW STANDARDS AGREEMENT

old

EN

Created by the European Committee for Standardization (CEN), applicable in Europe and selective affiliate countries (e.g., Australia).

new

EN ISO

Created cooperatively by ISO or CEN under the Vienna agreement; applicable in Europe and all countries that accept ISO; the defacto standard when Europe adopts it as an ISO standard.

old

ISO

Created by the International Standards Organization; generally accepted if it complies with local regulations; subject to PPE directives in Europe.

old

EN374

new

EN ISO 374

NEW TESTS

old

EN374-3:2003

PERMEATION

Scoring: 3 specimens taken from the palm or the weakest area are tested for breakthrough times and the lowest is the result.

Cuffs: No standard for cuff testing.

Chemicals Tested: The original list includes 12 chemicals labeled A through L.

new

EN ISO 374:2016* / EN 16523-1:2015

Scoring: 3 specimens taken from the palm are tested for breakthrough times and the lowest is the result; the performance level is correlated with the breakthrough time table.

Cuffs: Gloves with long cuffs greater or equal to 400mm are also to be tested with samples taken at 80mm from end of cuff.

Chemicals Tested: The chemical permeation table now includes 6 new categories labeled M through T.

M	Nitric acid 65%	7697-37-2	Inorganic mineral acid, oxidizing
N	Acetic acid 99%	64-19-7	Organic acid
O	Ammonia 25%	1336-21-6	Mineral 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

old

DEGRADATION

No standard in place.

new

EN374-4:2013

These are new test methods considering the glove before and after a contact with the chemical.

- Normative: Puncture Degradation Resistance test (as per the EN388 test for puncture resistance)
- Informative: Weight Change test

The results are reported in Instruction for Use as percentage of change due to degradation in perforation test.

old

EN ISO 374-1:2003

MICRO-ORGANISMS

Micro-organism requirements previously defined under the EN374-1 standard.

new

EN ISO 374-5:2016

Protection against bacteria and fungi.

new

EN ISO 374-5:2016* + ISO16604 / Method B:

Protection against bacteria, fungi and virus is now supported with a new pictogram.

*Official EN ISO 374:2016 standard to be published upon official availability.




Changes at a Glance

NEW MARKS & REQUIREMENTS

Dangerous Chemical Pictograms

Gloves can only claim protection against Chemical Risks when:

- Type C, B or A performance is achieved using the permeation test method EN16523-1:2015 (summarized here)

<p>EN ISO 374-1/Type C</p> 	<p>EN ISO 374-1/Type B</p>  <p>XYZ</p>	<p>EN ISO 374-1/Type A</p>  <p>UVWXYZ</p>
<p>At least Level 1 performance (more than 10 minutes) against at least one chemical on the list</p>	<p>At least Level 2 performance (more than 30 minutes) against at least three chemicals on the list</p>	<p>At least Level 2 performance (more than 30 minutes) against at least six chemicals on the list</p>



- The glove is leakage proof following testing using the EN374-2:2014 method
- Degradation performance for claimed chemicals is available through the information supplied by a manufacturer



The beaker icon (low chemical resistance / waterproof) has been eliminated.

Micro-organism Pictograms

The pictogram on the left previously related to bacteria and fungi. The new standard calls for a new viral penetration test. If a glove passes this extra test, the word, "Virus" will be added under the Micro-organism pictogram.

<p>EN ISO 374-5</p> 	<p>EN ISO 374-5</p>  <p>VIRUS</p>
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