

EN 374 – Protective gloves against Chemicals and Micro-Organisms

EN 374 is covered by 3 parts:

EN 374-1 – Terminology and performance requirements

EN374-2 – Resistance to penetration

EN374-3 – Resistance to permeation by chemicals

EN371-2

For a glove to be resistant to micro-organisms it must successfully undergo the penetration test and meet at least Level 2. The penetration test consists of the air leak test and the water leak test.

For the Air leak test the glove is immersed in water and the interior of the glove is filled with pressurised air. Leaks are detected if air bubbles emit from the glove.

For the water leak test the glove is filled with a minimum of 1L of water and hung with the fingers facing down. Leaks are detected by any water droplets appearing on the outside of the glove.

Performance Level	Acceptable Quality Level
Level 3	>0.65
Level 2	>1.5
Level 1	>4.0

Performance Level 2 is deemed to be an acceptable barrier against microbiological hazards.

EN374-2: 2003



EN371-3

Resistance to permeation is assessed by measuring the length of time it takes for a chemical to permeate the glove's material. There are 12 chemicals which are each given a corresponding letter. If a glove material can resist permeation for 3 chemicals on the list to at least Level 2. The glove is awarded pictogram 1 and the corresponding letters for the chemicals are placed beneath. If a glove cannot it is awarded pictogram 2. Other chemicals can be tested but will not have a corresponding letter.

EN374-3: 2003



A.B.C

*Pictogram 1

EN374-1: 2014



*Pictogram 2

Measured Breakthrough Time	Performance Level
>10 Minutes	Level 1
>30 Minutes	Level 2
>60 Minutes	Level 3
>120 Minutes	Level 4
>240 Minutes	Level 5
>480 Minutes	Level 6

Code	Chemical
A	Methanol
B	Acetone
C	Acetonitrile
D	Dichloromethane
E	Carbon disulphide
F	Toluene
G	Diethylamine
H	Tetrahydrofuran
I	Ethyl acetate
J	n-Heptane
K	Sodium hydroxide 40%
L	Sulfuric acid 96%