

## EN ISO374-1:2016

### (Protective gloves against dangerous chemicals and micro-organisms)

#### PART 1: TERMINOLOGY AND PERFORMANCE REQUIREMENTS FOR CHEMICAL RISKS:

The chemicals break through the glove material at a molecular level. The breakthrough time is here evaluated and the glove must withstand a breakthrough time of at least:

Type A – High protection, with a permeation resistance of at least 30 minutes for at least 6 test chemicals.

Type B – Medium protection, with a permeation resistance of at least 30 minutes for at least 3 test chemicals.

Type C – Basic protection, with a permeation resistance of at least 10 minutes for at least 1 test chemical

#### TYPE A



**EN ISO 374 - 1**  
**TYPE A**  
**ABCDE**

#### TYPE B



**EN ISO 374 - 1**  
**TYPE B**  
**ABC**

The third row in the pictogram for Type A and B indicates which chemicals, in the table below, the glove protects against. Type C doesn't have a third row and withstand 1 chemical only for a short while.

EN ISO 374-1:2016 specifies 18 test chemicals used to evaluate the permeation resistance of protective gloves. Each chemical is assigned a code letter for selection guidance:

| CODE LETTER | CHEMICAL               | CAS NO.   | 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 hydrocarbon             |
| 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  | Ester                               |
| J           | n-Heptane              | 142-82-5  | Saturated hydrocarbon               |
| K           | Sodium hydroxide 40%   | 1310-73-2 | Inorganic base                      |
| L           | Sulphuric acid 96%     | 7664-93-9 | Inorganic mineral acid, oxidizing   |
| M           | Nitric acid 65%        | 7697-37-2 | Inorganic mineral acid, oxidizing   |
| 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                            |