

# Permeation breakthrough times and degradation data according to EN ISO 374:2016

AlphaTec® 04-005

|  | Chemical agent          | CAS Number | Breakthrough Time (min) | Protection Index | Degradation (%) | Part |
|--|-------------------------|------------|-------------------------|------------------|-----------------|------|
|  | Ammonium Hydroxide, 25% | 1336-21-6  | 47                      | 2                | -15.1           | Palm |
|  | Ammonium Hydroxide, 25% | 1336-21-6  |                         |                  | 2.1             | Cuff |
|  | Formaldehyde, 37%       | 50-00-0    |                         |                  | 10.6            | Cuff |
|  | Formaldehyde, 37%       | 50-00-0    | > 480                   | 6                | -20.05          | Palm |
|  | Heptane                 | 142-82-5   |                         |                  | 11.4            | Cuff |
|  | Heptane                 | 142-82-5   | 95                      | 3                | -1.6            | Palm |
|  | Hydrofluoric Acid, 40%  | 7664-39-3  | >480                    | 6                | -24.0           | Palm |
|  | Hydrofluoric Acid, 40%  | 7664-39-3  |                         |                  | -20.0           | Cuff |
|  | Hydrogen Peroxide, 30%  | 7722-84-1  |                         |                  | 8.1             | Cuff |
|  | Hydrogen Peroxide, 30%  | 7722-84-1  | > 480                   | 6                | -6.6            | Palm |
|  | Methanol                | 67-56-1    | 87                      | 3                | -2.9            | Palm |
|  | Methanol                | 67-56-1    |                         |                  | 15.1            | Cuff |
|  | Nitric Acid, 65%        | 7697-37-2  |                         |                  | 12.3            | Cuff |
|  | Nitric Acid, 65%        | 7697-37-2  | 120                     | 4                | -18.2           | Palm |
|  | Sodium Hydroxide, 40%   | 1310-73-2  |                         |                  | 15.9            | Cuff |
|  | Sodium Hydroxide, 40%   | 1310-73-2  | > 480                   | 6                | -13             | Palm |
|  | Sulfuric Acid, 96%      | 7664-93-9  |                         |                  | 9.8             | Cuff |
|  | Sulfuric Acid, 96%      | 7664-93-9  | 120                     | 4                | -12.1           | Palm |
|  | Toluene                 | 108-88-3   | 34                      | 2                | 6.5             | Palm |
|  | Toluene                 | 108-88-3   |                         |                  | 21.1            | Cuff |

| Permeation breakthrough times according to EN ISO 374:2016   |                   |       |                   |         |                 |       |
|--|-------------------|-------|-------------------|---------|-----------------|-------|
| 0  | 1                 | 2     | 3                 | 4       | 5               | 6     |
| < 10   | 10-30             | 30-60 | 60-120            | 120-240 | 240-480         | > 480 |
| Not recommended  | Splash protection |       | Medium protection |         | High protection |       |
| <p>Data given in the table above are based on results of laboratory tests performed on the palm or cuff area of the glove. These tests were run using standard test methods that may not adequately replicate any specific conditions of end use. We wish to highlight that permeation times do not equate to safe wear time. Safe wear time may vary depending on whether the PPE is donned correctly, the surrounding temperature, the chemicals' toxicity, and other factors. Permeation information offered here is limited to the main protective material. Permeation times may vary around seams, zips, visors or any other joins or components of the PPE. It is the responsibility of your organization's Health and Safety professional to undertake a risk assessment before choosing the appropriate PPE for the task at hand. Because Ansell has no detailed knowledge or control over the conditions of end use, any of these data must be advisory only, and Ansell must decline any liability.</p> |                   |       |                   |         |                 |       |

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