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AnsellGUARDIAN<sup>®</sup> Chemical Report

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## Disclaimer

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In this report, you will find information related to the barrier performance of certain personal protective equipment (PPE) against the chemicals you selected. This information is intended to enable the Health and Safety professional at your organization make more informed decisions about the Ansell PPE that may offer the greatest protection in the intended circumstances and assist with carrying out a risk assessment for your organization.

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. If you want to discuss any aspect in detail, please contact us.

*Estimations of the barrier properties of PPE are based on currently available data and extrapolations from laboratory test results and information regarding the chemicals' composition. Synergistic effects of mixing chemicals have not been accounted for. Estimations are subject to change if new testing is carried out or new information is available providing better grounds for extrapolations. For these reasons, any information in this report is provided for informational purposes only and Ansell fully disclaims any liability including warranties related to any statement contained herein.*

## Legend for Hand Protection

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| Permeation Breakthrough Times |                   |  |
|-------------------------------|-------------------|--|
| <10                           | Not Recommended   |  |
| 10-30                         | Splash Protection |  |
| 30-60                         | Splash Protection |  |
| 60-120                        | Medium Protection |  |
| 120-240                       | Medium Protection |  |
| 240-480                       | Good Protection   |  |
| >480                          | Good Protection   |  |

Permeation breakthrough time is the time (in minutes) for the chemical in question to be permeating through the material at a rate of  $1.0 \mu\text{g} / \text{cm}^2 / \text{min}$  (as per EN ISO 374) or  $0.1 \mu\text{g} / \text{cm}^2 / \text{min}$  (as per ASTM F739).

PS = Physical State: A = Aerosol, G = Gas, L = Liquid, P = Paste, S = Solid



Product Group : 04-002.003  
 Brand : AlphaTec®  
 Material : PVC/Nitrile  
 Thickness (mm) : NA mm / NA mil

The permeation breakthrough times present in this chart were evaluated according to the EN ISO 374 and ASTM F739 standard. Colored cells with numbers and symbol (C) correspond to experimentally determined data generated by an accredited laboratory.

| CAS       | Chemical Name       | %     | PS | EN ISO 374 | ASTM F739 |
|-----------|---------------------|-------|----|------------|-----------|
| 64-19-7   | Acetic acid         | 50.0  | L  | > 480' c   |           |
| 64-19-7   | Acetic acid         | 100.0 | L  | 82' c      |           |
| 67-64-1   | Acetone             | 100.0 | L  | 20' c      |           |
| 75-05-8   | Acetonitrile        | 100.0 | L  | 35' c      |           |
| 1336-21-6 | Ammonium hydroxide  | 25.0  | L  | 72' c      |           |
| 1336-21-6 | Ammonium hydroxide  | 10.0  | L  | > 480' c   |           |
| 71-43-2   | Benzene             | 100.0 | L  | 20' c      |           |
| 75-09-2   | Dichloromethane     | 100.0 | L  | 10' c      |           |
| 109-89-7  | Diethylamine        | 100.0 | L  | 20' c      |           |
| 68-12-2   | Dimethylformamide   | 100.0 | L  | 59' c      |           |
| 64-17-5   | Ethanol             | 100.0 | L  | 85' c      |           |
| 50-00-0   | Formaldehyde        | 37.0  | L  | > 480' c   |           |
| 50-00-0   | Formaldehyde        | 50.0  | L  | > 480' c   |           |
| 142-82-5  | Heptane             | 100.0 | L  | 200' c     |           |
| 7647-01-0 | Hydrochloric acid   | 37.0  | L  | > 480' c   |           |
| 7664-39-3 | Hydrofluoric Acid   | 40.0  | L  | > 480' c   |           |
| 7722-84-1 | Hydrogen peroxide   | 30.0  | L  | > 480' c   |           |
| 67-63-0   | Isopropanol         | 100.0 | L  | 177' c     |           |
| 67-56-1   | Methanol            | 100.0 | L  | 73' c      |           |
| 78-93-3   | Methyl ethyl ketone | 100.0 | L  | 20' c      |           |



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| CAS       | Chemical Name                          | %     | PS | EN ISO 374 | ASTM F739 |
|-----------|--|-------|----|------------|-----------|
| 71-36-3   | n-Butanol                              | 100.0 | L  | 400' c     |           |
| 110-54-3  | n-Hexane                               | 100.0 | L  | 36' c      |           |
| 7697-37-2 | Nitric acid                            | 65.0  | L  | 150' c     |           |
| 7664-38-2 | Phosphoric acid                        | 85.0  | L  | > 480' c   |           |
| 1310-58-3 | Potassium Hydroxide, aqueous solutions | 30.0  | L  | > 480' c   |           |
| 1310-73-2 | Sodium Hydroxide                       | 40.0  | L  | > 480' c   |           |
| 7681-52-9 | Sodium Hypochlorite, aqueous solution  | 15.0  | L  | > 480' c   |           |
| 7664-93-9 | Sulfuric acid                          | 96.0  | L  | 93' c      |           |
| 7664-93-9 | Sulfuric acid                          | 50.0  | L  | > 480' c   |           |
| 108-88-3  | Toluene                                | 100.0 | L  | 30' c      |           |