

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

AlphaTec® 53-001

	Chemical agent	CAS Number	Breakthrough Time (min)	Protection Index	Degradation (%)	Part
	Acetic Acid, 99%	64-19-7			25.1	Cuff
	Acetic Acid, 99%	64-19-7	424	5	0.7	Palm
	Acetonitrile	75-05-8			32	Cuff
	Acetonitrile	75-05-8	78	3	36.6	Palm
	Ammonium Hydroxide, 25%	1336-21-6			23.8	Cuff
	Ammonium Hydroxide, 25%	1336-21-6	382	5	-21.7	Palm
	Diethylamine	109-89-7			48.1	Cuff
	Diethylamine	109-89-7	47	2	45.1	Palm
	Formaldehyde, 37%	50-00-0			14.2	Cuff
	Formaldehyde, 37%	50-00-0	> 480	6	5.4	Palm
	Heptane	142-82-5			9.4	Cuff
	Heptane	142-82-5	> 480	6	3.3	Palm
	Hydrofluoric Acid, 40%	7664-39-3	> 480	6	10	Palm
	Hydrogen Peroxide, 30%	7722-84-1			11.7	Cuff
	Hydrogen Peroxide, 30%	7722-84-1	> 480	6	-17.9	Palm
	Methanol	67-56-1			31.5	Cuff
	Methanol	67-56-1	264	5	6.2	Palm
	Nitric Acid, 65%	7697-37-2			10.5	Cuff
	Nitric Acid, 65%	7697-37-2	> 480	6	-7.6	Palm
	Sodium Hydroxide, 40%	1310-73-2			3.9	Cuff
	Sodium Hydroxide, 40%	1310-73-2	> 480	6	-15.3	Palm
	Sulfuric Acid, 96%	7664-93-9			29.2	Cuff
	Sulfuric Acid, 96%	7664-93-9	236	4	4.4	Palm
	Toluene	108-88-3			47.1	Cuff
	Toluene	108-88-3	35	2	40.9	Palm

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	

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.

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