Chemical permeation for Ansell AlphaTec 3000/4000

Permeation time according to standards
EN 369
EN 374-3

Permeation time	EN Class
< 10 minutes	0
> 10 minutes	1

Permeation time	EN Class
> 30 minutes	2
> 60 minutes	3
> 120 minutes	4

Permeation time	EN Class
> 240 minutes	5
> 480 minutes	6

NT = Not Tested

IP = Immediate Penetration

Chemical	CAS No.	3000 Permeation time	3000 EN Class	4000 Permeation time	4000 EN Class
Acetone	67-64-1	30	2	> 540	6
Acetonitrile	75-05-8	7	0	> 540	6
Acrylamide	79-06-1	> 480	6	> 480	6
Acrylonitrile	107-13-1	NT	NT	> 480	6
Acrylic acid	79-10-7	> 480	6	> 480	6
2-Aminoethanol 98%	141-43-5	NT	NT	> 480	6
Ammonia (gas)	7664-41-7	3	0	60	3
Ammonia (solution) 28%	1336-21-6	NT	NT	> 480	6
Ammonia (solution) 33%	7664-41-7	NT	NT	2	0
Ammonium hydrogen fluoride	1341-49-7	> 480	6	> 480	6
Aniline	62-53-3	> 480	6	> 480	6
3-Azapentane-1,5-diamine	111-40-0	NT	NT	> 480	6
Benlate	17804-35-2	> 480	6	> 480	6
Benzene	71-43-2	2	0	> 540	6
Benzenesulfonyl chloride 99%	98-09-9	> 480	6	NT	NT
Petrol, unleaded	8006-61-9	2	0	> 480	6
Benzyl chloride 99%	100-44-7	16	1	> 480	6
Bromine solution (water)	7726-95-6	2	0	10	1
1,3-Butadiene	106-99-0	NT	NT	> 540	6
Cyclohexylamine	108-91-8	NT	NT	83	3
Cypermethrin	52315-07-8	> 480	6	> 480	6
Diesel	68334-30-5	15	0	> 480	6
Diethanolamine 99%	111-42-2	NT	NT	> 480	6
Diethyl ether	60-29-7	IP	0	2	0
2-(Dimethylamino)pyridine 99%	5683-33-0	57	2	NT	NT
2,2'-Dichlorodiethyl ether	111-44-4	NT	NT	> 540	6
2,4-Difluoroaniline	367-25-9	> 480	6	> 480	6
1,1-Dichloroacetone	513-88-2	NT	NT	> 480	6
1,2-Dichloro-4-(trifluoromethyl) benzene	328-84-7	NT	NT	> 480	6
1,2-Dibromoethane	106-93-4	NT	NT	> 480	6
1,2-Dichloroethane	107-06-2	4	0	> 480	6
1,2-Dichloroethylene	156-60-5	2	0	NT	NT
1,3-Dichloroacetone	534-07-6	NT	NT	> 480	6
Dichloromethylsilane	75-54-7	NT	NT	20	1
Diquat dibromide	85-00-7	> 480	6	> 480	6
Dimethylamine	124-40-3	> 480	6	> 480	6
Dimethyl dicarbonate	4525-33-1	NT	NT	> 540	6
Dimethyl sulphate	77-78-1	> 480	6	> 480	6
Dimethyl sulfoxide	67-68-5	NT	NT	> 480	6
Dipropylentriamine	56-18-8	NT	NT	> 480	6
Di-tert-butyl peroxide 98%	110-05-4	NT	NT	> 540	6
Fuel oil 5 LS	68476-33-5	NT	NT	> 540	6
1,2-Ethanediol	107-21-1	> 480	6	> 480	6
Ethanol	64-17-5	NT	NT	> 540	6
Ethion	563-12-2	NT	NT	> 480	6
Ethyl acetate	141-78-6	3	0	> 540	6
Ethylbenzene	100-41-4	NT	NT	> 480	6
Ethylenediamine	107-15-3	NT	NT	> 480	6
Ethylene oxide	75-21-8	NT	NT	> 540	6
2-Ethylhexanoic acid	149-57-5	> 480	6	> 480	6
Ethyl chloroacetate 99%	105-39-5	NT	NT	> 480	6
Phenol 10%	108-95-2	NT	NT	> 540	6
Phenol 45%	108-95-2	> 480	6	> 480	6
Phenol/Benzene methanol 25/5	108-95-2 (in 100-51-6)	> 480	6	> 480	6
Phenol benzene	462-06-6	NT	NT	105	3
Hydrogen fluoride gas	7664-39-3	NT	NT	58	2
"Hydrofluoric acid (62-64% in urea)"	7664-39-3 (i 57-13-6)	41	2	NT	NT
Hydrofluoric acid 37%	7664-39-3	> 480	6	> 480	6
Hydrofluoric acid 71-75%	7664-39-3	NT	NT	> 540	6
Formaldehyde 37%	50-00-0	> 480	6	> 480	6
Phosphorus oxychloride	10025-87-3	9	0	NT	NT
Phosphorus pentachloride	10026-13-8	> 480	6	> 480	6
Phosphoric acid 85%	7664-38-2	> 480	6	> 480	6
Phosphorus trichloride	7719-12-2	NT	NT	> 540	6
2-Furaldehyde	98-01-1	> 540	6	> 480	6
Phthalic anhydride	85-44-9	> 480	6	NT	NT
Glyphosate, isopropylamine salt	38641-94-0	> 480	6	> 480	6
HCFC-123 (2,2-Dichloro-1,1,1-trifluoroethane)	306-83-2	251	5	380	5
Hexachlorobutadiene	87-68-3	NT	NT	> 540	6
1,1,1,3,3,3-hexamethyldisilazane	999-97-3	NT	NT	> 480	6
Hexane	110-54-3	IP	0	> 540	6
1,6-Hexylandiamine	124-09-4	> 480	6	NT	NT
Hydrazine monohydrate	7803-57-8	> 540	6	> 540	6
Isopropyl alcohol	67-63-0	> 480	6	> 480	6
Iodine	7553-56-2	> 540	6	NT	NT
Carbonyl dichloride	75-44-5	NT	NT	387	5
1-Chloro-2,3-epoxypropane	106-89-8	> 480	6	> 480	6
1-Chloro-4-nitrobenzene	100-00-5	NT	NT	> 480	6
2-Chloro-5-(chloromethyl) pyridine	70258-18-3	NT	NT	> 540	6
2-Chloroethanol 99%	107-07-3	> 480	6	NT	NT
2-Chloroacrylonitrile	920-37-6	NT	NT	> 480	6
Chlorine (gas) 99.8%	7782-50-5	10	0	> 540	6
Chlorine (solution) 99.9%	7782-50-5	2	0	> 480	6
Chloroacetyl chloride	79-04-9	36	2	> 480	6
Chlorosulphuric acid	7790-94-5	NT	NT	69	3
Hydrogen chloride gas	7647-01-0	8	0	> 540	6
Carbon disulphide	75-15-0	5	0	2	0
Cresol	1319-77-3	> 480	6	NT	NT

Chemical	CAS No.	3000 Permeation time	3000 EN Class	4000 Permeation time	4000 EN Class
Chromium trioxide	1333-82-0	NT	NT	> 540	6
Cumene	98-82-8	NT	NT	> 540	6
Mercury	7439-97-6	> 540	6	> 480	6
Malathion	121-75-5	NT	NT	> 480	6
Maleic anhydride	108-31-6	NT	NT	> 480	6
Methanol	67-56-1	> 540	6	> 540	6
(2-Methoxymethylethoxy) propanol	34590-94-8	NT	NT	> 480	6
Methoxyacetic acid	625-45-6	> 540	6	NT	NT
4-Methyl-1,3-phenylene diisocyanate	584-84-9	> 480	6	> 480	6
2-Methylbenzenamine	95-53-4	> 480	6	> 480	6
Methylene chloride	75-09-2	IP	0	12	1
Methyl ethyl ketone	78-93-3	NT	NT	> 540	6
Methyl iodide	74-88-4	> 480	6	NT	NT
Methyl chloroformate	79-22-1	NT	NT	> 540	6
Methyl chloride	74-87-3	NT	NT	> 540	6
Methyl chloride	74-87-3	NT	NT	> 480	6
Polymethyl methacrylate	80-62-6	NT	NT	> 540	6
Methyl parathion	298-00-0	NT	NT	> 480	6
Methyl t-butyl ether	1634-04-4	1	0	> 480	6
m-Cresol	108-39-4	> 480	6	> 480	6
Monochlorobenzene	108-90-7	NT	NT	> 480	6
Monochloroacetic acid 99%	79-11-8	NT	NT	> 480	6
m-Xylylenediamine	1477-55-0	NT	NT	> 540	6
Formic acid 90%	64-18-6	> 480	6	> 480	6
N,N-Diethylamine	109-89-7	IP	0	IP	0
N,N-Dimethylacetamide	127-19-5	NT	NT	> 480	6
N,N-dimethylformamide	68-12-2	> 480	6	> 540	6
Sodium bisulfate 40%	7681-38-1	> 480	6	NT	NT
Sodium cyanide	143-33-9	> 480	6	> 480	6
Sodium fluoride	7681-49-4	> 480	6	> 480	6
Sodium hypochlorite	7681-52-9	> 480	6	> 480	6
Sodium silicon fluoride	16893-85-9	> 480	6	> 480	6
Sodium chloride	7647-14-5	> 480	6	> 480	6
Sodium methylate 30%	124-41-4	> 480	6	NT	NT
Baking soda liquor 40%	1310-73-2	> 540	6	> 540	6
Sodium hydroxide 50%	1310-73-2	> 540	6	> 540	6
n-Butanol	71-36-3	> 480	6	> 480	6
n-Butyl acrylate	141-32-2	15	1	> 480	6
n-Heptane	142-82-5	IP	0	> 540	6
Nicotine	54-11-5	NT	NT	> 540	6
Nitrobenzene	98-95-3	> 480	6	NT	NT
Nitrobenzene 99.99%	98-95-3	NT	NT	> 540	6
N-Methyl-2-pyrrolidone	872-50-4	> 480	6	> 480	6
o-Chlorotoluene	95-49-8	NT	NT	> 480	6
o-Cresol	95-48-7	> 480	6	> 480	6
Paraffin	92062-35-6	25	1	> 480	6
Parathion	56-38-2	NT	NT	> 480	6
1-Pentyl acetate	628-63-7	NT	NT	> 480	6
Perchloroethylene	127-18-4	NT	NT	> 480	6
Perchloric acid 30%	7601-90-3	> 540	6	NT	NT
Pivaloyl acid	75-98-9	> 480	6	> 480	6
p-Chloroaniline	106-47-8	NT	NT	> 480	6
p-Chlorotoluene	106-43-4	NT	NT	> 480	6
p-Cresol	106-44-5	> 480	6	> 480	6
Polyethylene glycol	25322-68-3	> 480	6	> 480	6
Prochloraz manganese chloride complex	75747-77-2	> 480	6	NT	NT
Propionaldehyde	123-38-6	70	3	> 480	6
Propionitrile	107-12-0	NT	NT	> 480	6
Propionic acid	79-09-4	NT	NT	> 480	6
Propylene oxide	75-56-9	NT	NT	17	1
Nitric acid 70%	7697-37-2	> 480	6	> 540	6
Nitric acid 99.5%	7697-37-2	NT	NT	> 540	6
Hydrochloric acid 37%	7647-01-0	> 540	6	> 480	6
Styrene	100-42-5	2	0	> 480	6
Sulfur dioxide gas	7446-09-5	NT	NT	170	4
Sulfuric acid 50%	7664-93-9	NT	NT	> 540	6
Sulfuric acid 96%	7664-93-9	> 540	6	> 540	6
Sulfuric acid 98+%	7664-93-9	> 480	6	> 480	6
Hydrogen sulfide	7783-06-4	NT	NT	> 540	6
Tetrahydrofuran	109-99-9	IP	0	5	0
Tetrachloroethylene	127-18-4	NT	NT	> 540	6
Tetramethylammonium hydroxide	75-59-2	NT	NT	> 480	6
Thiourea dioxide	1758-73-2	> 480	6	> 480	6
Thionyl chloride	7719-09-07	IP	0	2	0
Toluene	108-88-3	IP	0	> 540	6
Triacetonediamine	36768-62-4	NT	NT	> 540	6
Triethylamine	121-44-8	IP	0	5	0
Trifluoroacetic acid 99%	76-05-1	> 540	6	NT	NT
Trichloroethylene	79-01-6	2	0	7	0
Trichloromethane	67-66-3	IP	0	11	1
Trichloroacetic acid 98%	76-03-9	> 480	6	> 480	6
Vinyl acrylate	2177-18-6	NT	NT	> 480	6
Vinyl Benzyl Chloride	57458-41-0	NT	NT	> 480	6
Vinyl acetate	108-05-4	3	0	> 540	6
Hydrogen bromide	10035-10-6	> 480	6	> 540	6
Hydrogen peroxide 35%	7722-84-1	> 480	6	> 480	6
Xylene	1330-20-7	2	0	> 480	6
Zinc bromide	7699-45-8	> 480	6	NT	NT
Acetic acid	64-19-7	> 540	6	> 540	6
Acetic anhydride	108-24-7	> 540	6	> 540	6

Note:

The material used for the two air conductors in the ventilation opening does not have the same chemical barrier as the rest of the Ansell AlphaTec® 3000 fabric. The task of the air conductors is to prevent physical splashes from penetrating directly through the ventilation opening. For this reason, it is conceivable that the Ansell AlphaTec 3000 is unsuitable for certain applications. For permeation times for all chemicals, please refer to the manufacturer. All information is for guidance only. The suitability of the finished garment must be determined by the user in consultation with the employer.