PERMEATION BREAKTHROUGH TIMES

Ansell GUARDIAN®

ASTM F739 - Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 0.1 µg/cm² /min
EN 16523-1: 2015 (formerly EN374-3) - Breakthrough of the test chemical is deemed to have occurred when the permeation rate has reached 1.0 µg/cm² /min

PERMEATION BREAKTHROUGH TIMES (MINUTES)		POLYMER	NITRILE		NEOPRENE		NEOPRENE		NATURAL RUBBER LATEX		NATURAL RUBBER LATEX		CSM		CSM		EPDM+		EPDM		EPDM	
		PALM THICKNESS	0.45 MM		0.51 MM		0.76 MM		0.51 MM		0.76 MM		0.4 MM		0.6 MM		0.51 MM		0.4 MM		0.6 MM	
0		PRODUCT	BioClean™ GGL CGL GHG CHG		AlphaTec® 55-300 55-301 55-302 55-305 55-307		AlphaTec® 55-303 55-306 55-308		AlphaTec® 55-100 55-104 55-110 55-112 55-113		AlphaTec® 55-101 55-105 55-107 55-109		AlphaTec® 85-300 85-302 85-304		AlphaTec® 85-301 85-303 85-305		AlphaTec® 85-600 85-601 85-602		AlphaTec® 85-500 85-502 85-504		AlphaTec® 85-501 85-503 85-505	
<10		STANDARD	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN	ASTM	EN
Not recommended																						
1	2																					
10-30	30-60																					
Splash protection																						
3	4																					
60-120	120-240																					
Medium protection																						
5	6																					
240-480	>480																					
High protection																						
CHEMICAL NAME	%	CAS																				
1-BUTANOL (BUTYL ALCOHOL)	100	71-36-3	>480	>480																		
1-PROPANOL (PROPYLALCOHOL, N-PROPANOL)	100	71-23-8																				
ACETIC ACID, GLACIAL	99	64-19-7	110	107						80		81	>480	>480			116	117				
ACETONE (2-PROPANONE)	100	67-64-1	7	7								20	15	15								
CITRIC ACID	100	77-92-9	>480	>480									>480	>480			>480	>480				
CYCLOHEXANE	100	110-82-7																				
ETHANOL (ETHYLALCOHOL)	100	64-17-5	278	364													>480	>480				
FORMALDEHYDE	37	50-00-0	>480	>480		>480		>480		>480		>480	>480	>480			>480	>480				
HEPTANE (N-HEPTANE)	100	142-82-5		>480	162	275	268	264	<10	<10	<10	<10	284	>480	473	>480	10	10	6	6	7	8
HEXANE (N-HEXANE)	100	110-54-3	>480	>480									56	57	275	>480	6	6	6	6	7	8
HYDROCHLORIC ACID	37	7647-01-0	>480	>480									>480	>480			>480	>480				
HYDROFLUORIC ACID	48	7664-39-3	>480	>480									>480	>480			>480	>480				
HYDROGEN PEROXIDE	37	7722-84-1	>480	>480		>480		>480		>480		>480		>480		>480		>480		>480		>480
ISOBUTANOL (ISOBUTYLALCOHOL)	100	78-83-1																				
ISOPROPYLALCOHOL (IPA, ISOPROPANOL, 2-PROPANOL)	100	67-63-0	>480	>480									>480	>480								
METHANOL	100	67-56-1	56	57						42		83	409	376	316	376	18	240				
METHYL ETHYL KETONE (2-BUTANONE, MEK)	100	78-93-3																				
NITRIC ACID	65	7697-37-2											>480	>480	>480	>480	282	>480				
PHOSPHORIC ACID	45	7663-38-2	>480	>480									>480	>480			>480	>480				
SODIUM HYDROXIDE (NAOH)	50	1310-73-2	>480	>480		>480		>480		>480		>480								>480		>480
SODIUM HYPOCHLORITE	8.5	7681-52-9	>480	>480									>480	>480			>480	>480				
SULFURIC ACID	50	7664-93-9	>480	>480																>480		>480
SULFURIC ACID	96	7664-93-9				190		285		474		>480										
DISINFECTANTS																						
DECON-CLEAN®					>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480
DECON-SPORE 200® PLUS					>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480
KLERCIDE™ CR BIOCIDE S													11	>480	>480	>480	17	>480	<10	>480	<10	>480
KLERCIDE™ Y													>480	>480	>480	>480	>480	>480	>480	>480	>480	>480
LPH® SE					>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480
SPORE-KLENZ®					>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480
VESPHENE® IISE					>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480	>480

When a number is listed in a cell, this means that an actual test has been performed. The number is showing the permeation time in minutes. When a cell is coloured, with no number, the permeation time is based on extrapolation issued from Ansell Guardian. When a cell is white, no data is available

In this report, you will find information related to the barrier performance of certain personal protective equipment (PPE) against the chemicals. 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.

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