



WHY CHOOSE BIOCLEAN™ NITRILE ISOLATOR/RABS GLOVES?

Nitrile is a synthetic, non-solvent based, FDA approved polymer and is an ideal alternative to CSM, EPDM and latex, where the risk of latex allergies is a concern. With excellent anti-static properties, preventing the buildup of static electricity, nitrile is ideal for use with flammable liquids and powders. It can also be sanitised by Gamma Irradiation, Vapourised Hydrogen Peroxide (VHP) and Isopropyl Alcohol (IPA) and non-sterile options can also be washed, processed and packaged within a cleanroom environment, ensuring the gloves are an ultra-low contamination risk before being introduced into the isolator glove box.

ISOLATOR GLOVE MATERIAL COMPARISON

Polymer	Sterilization Gamma	Repeated sterilization		FDA Compliance	Cost	Comfort	Mechanical Properties	Chemical Resistance
		Autoclave	VHP					
Nitrile	Excellent	Fair	Excellent	Excellent	Very Good	Very Good	Very Good	Very Good
CSM	Fair	Fair	Excellent	Poor	Very Good	Very Good	Very Good	Very Good
EPDM	Very Good	Excellent	Excellent	Excellent	Fair	Very Good	Very Good	Very Good
EPDM Plus	Very Good	Excellent	Excellent	Excellent	Fair	Very Good	Very Good	Very Good
Natural Rubber Latex	Fair	Poor	Fair	Excellent	Excellent	Excellent	Fair	Fair
Neoprene	Fair	Poor	Poor	Excellent	Very Good	Very Good	Fair	Very Good



YOUR CONFIDENCE, OUR PRIORITY

Ansell RABS and Isolator gloves have quality built in, because our quality control procedure is one of the most rigorous in the industry, including:

Inspection & testing of raw materials

Controls & testing during manufacturing process (ensuring dipping, physical and chemical parameters are met)

External accredited laboratory testing to comply with international standards

Final inspection controls;

Inspection for holes, visually and subsequently using a water and air pressure test







100% visual inspection

Dimension controls

Integrity test

Labelling & packing controls

NITRILE PRODUCT PORTFOLIO OVERVIEW

BioClean™	BioClean™ GGL	BioClean™ CGL	BioClean™ GGL30NITM9	BioClean™ GSL	BioClean™ GSG10NIT80/ GSG10NIT85	BioClean™ GSG10NITXMA
						
Material	Nitrile	Nitrile	Nitrile	Nitrile	Nitrile/ PCP	
Style	Glove	Glove	Mitten	Sleeve	Sleeve Glove System	
Sterility	Sterile & Cleanroom Laundered	Non-Sterile & Cleanroom Laundered	Sterile or Non-Sterile	Sterile	Sterile	
Cuff Thickness	0.50mm/20mil	0.50mm/20mil	0.50mm/20mil	0.50mm/20mil	0.50mm/20mil	0.50mm/20mil
Port Size	8, 10, 12"	10, 12"	10, 12"	6, 8, 10, 12"	8, 10"	
Length	840mm/33"	840mm/33"	840mm/33"	660mm/26"	900mm / 35"	995 mm / 39"
Hand Size	9.75/L	9.75/L	9.75/L	9.75/L	8/M, 8.5/M	

NITRILE MATERIAL BENEFITS

- FDA approved polymer
- Excellent anti-static properties
- Performs well with VHP or IPA
- Superior comfort and dexterity
- Excellent chemical resistance

CHEMICAL PERMEATION RESULTS TABLE - BIOCLEAR™ GGL, CGL, GHG & CHG

*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)	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	

CHEMICAL NAME	%	CAS	STANDARD	
			ASTM*	EN**
1-BUTANOL (BUTYL ALCOHOL)	100	71-36-3	>480	>480
1-PROPANOL (PROPYLALCOHOL, N-PROPANOL)	100	71-23-8	240-480	240-480
ACETIC ACID, GLACIAL †	99	64-19-7	110	107
ACETONE (2-PROPANONE)	100	67-64-1	7	7
CITRIC ACID	100	77-92-9	>480	>480
CYCLOHEXANE	100	110-82-7	240-480	240-480
ETHANOL (ETHYLALCOHOL)	100	64-17-5	278	364
FORMALDEHYDE †	37	50-00-0	>480	>480
HEPTANE (N-HEPTANE) †	100	142-82-5	240-480	>480
HEXANE (N-HEXANE)	100	110-54-3	>480	>480
HYDROCHLORIC ACID	37	7647-01-0	>480	>480
HYDROGEN PEROXIDE	37	7722-84-1	>480	>480
ISOBUTANOL (ISOBUTYLALCOHOL)	100	78-83-1	240-480	240-480
ISOPROPYLALCOHOL (IPA, ISOPROPANOL, 2-PROPANOL)	100	67-63-0	>480	>480
METHANOL †	100	67-56-1	56	57
METHYL ETHYL KETONE (2-BUTANONE, MEK)	100	78-93-3	<10	<10
PHOSPHORIC ACID	45	7664-38-2	>480	>480
SODIUM HYDROXIDE (NAOH) †	50	1310-73-2	>480	>480
SODIUM HYPOCHLORITE	8.5	7681-52-9	>480	>480
SULFURIC ACID	50	7664-93-9	>480	>480
SULFURIC ACID	96	7664-93-9	<10	<10

CHEMICAL PERMEATION RESULTS TABLE - BIOCLEAR™ GGL, CGL, GHG & CHG

*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.

THIRD PARTY DISINFECTANT BRANDS	STANDARD	
	ASTM*	EN**
DECON-CLEAN®	240-480	240-480
DECON-SPORE 200® PLUS	240-480	240-480
KLERCIDE™ CR BIOCIDES	240-480	240-480
KLERCIDE™ Y	240-480	240-480
LPH® SE	240-480	240-480
SPORE-KLENZ®	240-480	240-480
VESPHENE® IISE	240-480	240-480

† Certified test result

Please see product validation pack for full permeation results. 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 AnsellGUARDIAN®. When a cell is white, no data is available.

The chemical permeation results table is 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 organisation 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 organisation. 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 organisation'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.