






This chart provides medical professionals with an easy-to-use guide for choosing the best glove film for their particular applications. Ansell's solution-oriented approach to medical gloves provides you with product options in latex, neoprene, nitrile, polyisoprene and vinyl.

GLOVE TYPE	Level of Barrier Protection	Allergen Content	Strength and Durability	Elasticity	Puncture Resistance	Fit and Comfort	Chemical Resistance*	Economy	Recommended Use	Environmental Impact
 LATEX	Excellent The long-standing benchmark for barrier protection due to its strength and elasticity.	Varies Latex contains protein and chemical allergens. Powder-free gloves are lower in allergens than powdered gloves.	Excellent Natural rubber latex is very strong and durable. Tensile strength is typically 3000 psi or better.	Excellent Latex elasticity is superior to the other glove films currently available. Memory is very high allowing the film to always return to its original shape. Elongation limit is about 750%.	Very Good Latex is very resistant to punctures but can be pierced by very sharp objects.	Excellent Latex provides excellent comfort and fit due to its high elasticity and memory.	Good Provides good protection from most caustics and detergents. Also recommended by OSHA for cytotoxic drugs.	Very Good Latex provides very good economy for general use. Powder-free versions are more expensive than powdered.	Available for both examination and surgical applications.	Excellent Easily decomposes in landfills because it is a natural product. Incineration produces mostly water and carbon dioxide.
 NEOPRENE	Very Good Neoprene provides barrier protection similar to latex.	Excellent Neoprene contains no latex proteins but contains a low level of chemical allergens.	Very Good Unbroken neoprene is strong. However, once punctured, the film tends to tear easily. Tensile strength is typically 3000 psi or better.	Excellent Neoprene elasticity is close to that of latex and memory is very high, allowing the film to retain its original shape. Elongation limit is about 750%.	Good Neoprene is somewhat puncture resistant.	Excellent Neoprene provides excellent comfort and fit due to its high elasticity and memory.	Excellent Neoprene exhibits good resistance to most chemicals, oils and fats.	Good Neoprene is more expensive than latex but can be justified when weighed against the cost of managing latex allergies.	Available for both examination and surgical applications.	Varied Does not decompose in landfills. Incineration produces significant amounts of hydrochloric acid.
 NITRILE	Excellent Nitrile film is highly resistant to punctures and tears.	Very Good Nitrile contains no latex proteins but contains some curing agents.	Excellent Nitrile film is extremely strong with puncture resistance superior to all glove films. Tensile strength is typically well above 3000.	Very Good Nitrile elasticity is very good with elongation limits typically 500% or better. Nitrile exhibits some memory, allowing the film to adapt to the wearer's hand.	Excellent One of nitrile's strong points. Puncture resistance is superior to all other medical glove films currently available.	Very Good Nitrile provides very good comfort and fit due to its high elasticity and memory. Due to a slightly tighter fit, users often choose a larger size.	Excellent Nitrile exhibits excellent resistance to most chemicals especially harsh solvents. OSHA recommends nitrile for cytotoxic drugs.	Good Nitrile is more expensive than latex but can be justified when weighed against the cost of managing latex allergies.	Available for examination applications only.	Varied Does not decompose in landfills. Incineration produces mostly water and carbon dioxide.
 POLYISOPRENE	Fair Polyisoprene is a good barrier protection but is more permeable than latex. Resistant to punctures.	Very Good Polyisoprene contains no latex proteins but contains some curing agents.	Very Good Polyisoprene is durable. Tensile strength is typically 2500 psi or better.	Excellent Polyisoprene elasticity is similar to natural rubber.	Good Polyisoprene is somewhat puncture resistant.	Very Good Polyisoprene provides very good comfort and fit due to similar properties to natural rubber latex, but slightly stiffer.	Fair Polyisoprene provides fair protection against alcohol and other water-based solutions.	Good Polyisoprene is more expensive than latex but can be justified when weighed against the cost of managing latex allergies.	Appropriate for both examination and surgical applications.	Varied Does not decompose in landfills. Incineration produces mostly water and carbon dioxide.
 VINYL (Polyvinyl Chloride, PVC)	Poor Vinyl breaks and punctures easily during use, and the fit around the wrist is baggy, making it a poor barrier.	Very Good Vinyl contains no natural rubber proteins and no chemical curing agents.	Poor Vinyl is the weakest of the glove films and tends to break and puncture easily when stressed. Tensile strength is typically below 2000 psi.	Fair to Poor Vinyl elasticity is limited and varies from brand to brand. Typical elongation limit is less than 500%. The film exhibits limited memory.	Poor Vinyl is easily punctured by sharp objects.	Fair Low elasticity limits fit and comfort for many users. The wrist diameter is usually very large making the glove baggy around the cuff.	Fair Offers less protection than the other polymer materials.	Very Good Vinyl costs are typically similar to those of latex. Vinyl is a low-cost alternative.	Available for examination applications only.	Poor Does not decompose in landfills. The plasticizers in vinyl are hormone mimics; if they leach out into the environment, they can have significant impact on wildlife. Incineration produces significant amounts of hydrochloric acid.

For more information on these products or for information regarding latex allergies and other educational materials, contact your Ansell Clinical Consultant or your Ansell Account Manager.

*When used within accordance with published guideline.