How do I know which gloves are right for me?

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Step one: **Determine the level of protection you need**. Could your gloves be splashed or immersed? What types of chemicals do you think you will use? Do you need protection from sharps, heat, or radiation?

Step two: **Find your supplier's glove selection guide**. This is usually provided on their online store or website.

	Material	Lami-nated film	Polyvinyl alcohol	Nitrile		Nitrile				Nitrile	Neoprene	Neoprene	Neoprene /Natural rubber blend	Viton / butyl
Chemical name	CAS[1]													
1-Methoxy-2-Propanol	107-98-2	> 480	> 480	240 - 480	236	240 - 480	236	120 - 240	60 - 120	10 - 30	30 - 60	60 - 120	10 - 30	> 480
1-Methoxy-2-propylacetate	108-65-6	> 480	> 480	120 - 240	132	120 - 240	132	120 - 240	60 - 120	< 10	10 - 30	10 - 30	< 10	120 - 240
Acetic acid, glacial	64-19-7	> 480	< 10	190	61	190	61	104	30 - 60	9	193	> 480	129	> 480
Acetone	67-64-1	> 480	37	10 - 30	7	10 - 30	7	6	< 10	< 5	17	< 5	8	60 - 120
Acetonitrile	75-05-8	> 480	145	20	11	20	11	13	< 10	< 5	34	28	14	60 - 120
Acrylic acid	79-10-7	> 480	< 10	30 - 60	40	30 - 60	40	30 - 60	10 - 30	< 5	64	> 480	60 - 120	> 480
Acrylonitrile	107-13-1	> 480	> 480	< 10	< 10	< 10	< 10	6	< 10	< 10	15	43	9	> 480

Step three: **Check your glove's chemical resistance.** Many charts use color coding to indicate how long it takes a chemical to go through the glove, called its "breakthrough" or "penetration" time. If using a mixture or unlisted chemical, follow the most similar listed chemical with the shortest penetration time.

Permeation breakthrough times according to EN374-3:2003						> Greater than (time) < Less than (time)
> 480 mins	240 480 mins	120 240 mins	60 120 mins	30 60 mins	10 30 mins	< 10 mins
High protection		Medium protection		Splash protection		Not recommended

Step four: **Check the physical properties**, including flexibility and puncture resistance, in the glove's description.

Increase your protection by double-gloving and designing experiments to minimize exposure!

(1) http://amo-csd.lbl.gov/downloads/Chemical%20Resistance%20of%20Gloves.pdf
(2) https://www.augusta.edu/services/ehs/chemsafe/PDF%20files/gloveselechart.pdf
(3) https://www.labtek.com.au/SuppliersData/Ansell/Chemical%20Handling%20Glove%20Guide.pdf