

these two systems were compared in the vasoconstrictor assay (18) there was no difference in biological response between them. Under closed-patch irritation studies, however, the propylene glycol-based vehicle was more irritating, as expected (17).

It may not always be possible to carry each different vehicle through all the steps just described. One part that can always be conducted is the saturation step. If the solubilities are tenfold or greater in difference, one might encounter reservoir limitations, as discussed earlier, for their films. Unless there are toxicity concerns, one should seek to find a very soluble vehicle to provide a long-lasting reservoir. The *in vitro* penetration step may have to be omitted, but it is highly recommended that it be included because, for example, solvents such as polyethylene glycol (10,19-21) or glycerol have a tendency to retard penetration compared with propylene glycol.

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