

<b>Q&amp;A Report:</b>	<b>Desperately Seeking Synergy</b>
<b>"Question Asked"</b>	<b>Answer Given</b>
Which Design of Experiment Software do you like the most? Which one is used with the most frequency in industry?	<i>My preference is for "pure mixture" and "mixture amount" experiment is StatEase followed by JMP. They are also the ones I am most familiar with. I am not trying to promote either of these or the others I mention in my presentation, I do not know which is used most frequently.</i>
Are these software available for free or require a cost?	<i>I believe they still offer free trials but no freebies that I am aware of.</i>
Which software is more effective? Minitab or JMP	<i>Not familiar with Minitab.</i>
Is there minimum percentages? what is the minimum percentage that I should include to run the software	<i>You set the parameters based on some fundamental knowledge of the ingredients you are working with. The only true constraints are that 1) no ingredient can be used at a negative percent (should be obvious) 2) sum of all ingredients being investigated must equal to 1 (100%). YOU can not use DOE to predict performance outside of the percentages used.</i>
Is JMP useful for cosmetics formulation?	<i>Yes</i>
How synergy can be useful in optimizing active cosmetics ingredients?	<i>Look for synergies with solubilizers, spreading agents, skin penetrants, We have used it to optimize the monomer ratios in polymers and I suspect you can do the same with the components of the active itself.</i>
How we can learn this techniques for cosmetics formulation? Is there any guidelines available.?	<i>StatEase and I suspect others have many online tutorials available,</i>
How were the thickeners added?	<i>That certainly makes a difference. I followed what was in the article provided in the references slide.</i>
Where both thickeners mix together added to the batch?	<i>As I recall Thicken A , Thickenr B and water composed the entire batch.</i>
Is there an app for DOE you can download?	<i>Not that I am aware of.</i>