Water Wash Procedures

Step 1. Pull light vacuum and allow fluid to fill to desired volume with resin in solution. Turn off vacuum and burp top gl14 (point away from face) if need to stop fluid flow.

Step 2. Pull light vacuum and allow fluid to fill to desired volume with highly saturated salt water solution. Turn off vacuum and burp top gl14 if need to stop fluid flow. Allow to sit until solution seperates. Your oil will be on the top layer and you will see a pronounced red in the water layer on bottom. The middle will form a small layer as well.

Step 3. Once the fluid has seperated and the middle layer has thinned out, carefully open the stopcock and dispense the bottom two layers and repeat this step between 8-14 times. You will stop when the water is colorless.

Step 4. Eventually you will have a very clear water layer and no middle layer. Your oil solution is now very basic from the salt water washes. Seperately prepare distilled or RO/DI water set at 6-6.5 pH with citric acid.

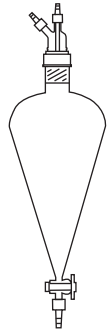
Step 5. Pull light vacuum and allow fluid to fill to desired volume with citric acid water solution. Turn off vacuum and burp top gl14 if need to stop fluid flow. Allow to sit until solution seperates. Your oil will be on the top layer and you will see a pronounced pinkish color in the water layer on bottom.

Step 6. Repeat step 5 to keep removing color from the water layer until there is no color. Also test the pH of the seperated portion in each pass to ensure pH is stable. Stop when the water is clear and the pH from the last pass is stablized.

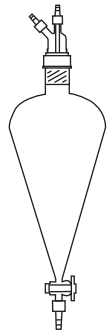
Step 7. Open the stopcock and remove the water layer entirely from the system.

Step 8. Shake vigorisly to remove all the water from the glass walls and any crevasses.

Step 9. Repeat this process until there is NO water left to remove in the seperation.



Step 10. Remove all fluids from the seperatory funnel. You have now completed the water wash process.



Step 11. Optional. In preperation for chromatography you can prepare a wet bed of sodium bicarbonate and rinse your oil solution that hasn't been water washed by running over the bed of sodium bicarbonate. This will further neutralize any acidic or basic chemicals left over.