

## Managing pH & Foaming in MICA EAA Primers

It is imperative to maintain adequate pH levels when using Mica's Ethylene Acrylic Acid (EAA) primers. If the pH drops, foaming or other issues may occur which could slow down production, or worse, ruin the primer. This document is meant to assist you with maintaining the pH levels in our EAA products, and to give suggestions on how to fix the primer solution if the pH levels decrease.

### Adequate pH Levels

The EAA in our products is stabilized with ammonia, therefore, the pH should be maintained between the levels of 10.8 and 11.3.

### Troubleshooting

If the pH drops below the recommended levels, the solids will drop out of solution. To prevent this from happening, create an ammonia water solution by diluting concentrated ammonia (ammonium hydroxide) with water from 28% down to 10%. Add 50-100 ml of the ammonia water solution to the primer pan and stir gently with a wooden or other non-reactive stick until the pH level is back in range. If the pH decreases to 9.5, the solids will not easily mix back into the solution and the primer should be discarded; at this point, even concentrated ammonia will not reverse the chemical process quickly. If the primer needs to be discarded, the primer pan and coating system should be rinsed before adding fresh solution back to the primer pan.

Foaming may occur if the solution is being stirred or pumped too quickly, even if it is at the correct pH level. Stirring and recirculating the primer slowly will reduce the loss of ammonia and/or air entrainment which will help reduce the risk of foaming. If you are certain the pH level is in the correct range, and foaming is still occurring, check if the foam is coming from the circulation pump. If it is, adjust the pump to ensure the primer is flowing slowly and gently through the recirculation system. For more information and tips on measuring and maintaining flowrates, see our Primer Intelligence Article entitled "Selecting the Correct Plumbing System in your Priming Station".

### Contact Us

If you still have questions about maintaining pH levels or foaming, please contact your Mica Technical Sales Representative directly, or call us at (203) 922-8888.