## Testing Method

### Scope
This test is used to qualitatively determine the condition of a cured UV coating film by testing the chemical resistance of the cured film by exposure to Acetone under controlled testing conditions. This testing type/method is also referenced under ASTM 5402-15 ‘Standard Practice for Assessing the Solvent Resistance of Organic Coatings Using Solvent Rubs’.

### Test Measurement Instruments
- Acetone
- Cotton Swabs(Q-Tips)
- PPE as noted in the Acetone SDS; example: solvent-resist gloves, respirator, eye protection

### Test Limitations
- Acetone testing is qualitative yet subjective as the testing process and observed results can vary by individual
- This testing method is best used for comparative purposes
- UV coating film thickness will influence the final results in conjunction with the degree of UV coating film cure. A higher volume/thicker film of UV coating can exhibit greater Acetone resistance compared to a lower volume/thinner film

### Test Procedure
1. Obtain a clean and dry UV coating sample to be tested
2. Determine the number of double-rubs (one back-forth motion) to conduct during the initial testing; consult CAC with the coating product number to be tested for this recommendation
3. Wearing PPE, dip the end of the cotton swab into the Acetone solution and immediately rub the UV coating surface using a firm stroke in a back-forth(one double-rub) motion for a length of ~2” for the pre-determined number of double-rubs
4. Examine the UV coating film for the effects of the testing. If the coating film has been removed down to the substrate, re-conduct the test in a new area of the UV coating sample using a lower number of double-rubs. If the coating film has not been removed down to the substrate, re-conduct the test in a new area of the UV coating sample using a higher number of double-rubs.
5. Repeat the testing process until the number of double-rubs just removes the UV coating film down to the substrate surface; this is the Acetone resistance of the UV coated sample