

### **Ink Adhesion Trials**

We perform industry standard adhesion tests to ensure a stable adhesion to our customers' products. This also allows us to determine the correct ink and components to use when printing. It also allows us to determine whether or not the surface requires a pre-treatment prior to printing.

### **Thumbnail Scratch Test**

This is the most basic of tests and is performed by rubbing a thumbnail over the area approximately 10-20 times. If the print remains intact, then it is a pass. If the print scratches off then it fails.



### **Tape Test**

This test is performed by placing clear tape onto the printed area and then peeling off quickly. We then check the tape for print residue. If the tape is clear, then it is a pass. If the tape has print residue on, then it is a fail.



### **Ethanol Rub Test**

This test is performed by soaking a cotton bud in an Ethanol solvent (CA563175) and rubbing over the printed area with pressure approximately 20 times. If the printed area is not affected, then it is a pass. If the printed area is affected (EG: faded print, product visible through print etc...) then it is a fail.



### **Cross Hatch Test**

The cross hatch test is performed by using a blade to score the print in a crosshatch pattern. Clear tape is then rubbed over the top and peeled off quickly. If any of the diamonds within the crosshatch are damaged in any way, or if there is print residue on the tape, then it is a fail.



### **Dishwasher Test**

This test is performed by simply placing the printed item in a dishwasher at 80 degrees and checking afterwards that print is not affected in anyway.

### **Petrol Rub Test**

A petrol rub test is performed in the same way as an ethanol test, with 20 pressured rubs to the printed area.

### **IPA Solution Rub Test**

An IPA Solution test is performed by soaking the product in an alcohol solution for one hour then applying 20 pressured rubs to the printed area.

### **PGDD Solution Rub Test**

A PGDD Solution test is performed in the same way as an IPA test, with the product soaking in PGDD solution for one hour then applying 20 pressured rubs to the printed area.