

# Separating water soluble and acetone soluble inks



**ASSIGN  
BUSTER**

## Separating Water Soluble and Acetone Soluble Inks Through

Chromatography BY DutchGtr112 Separating Water Soluble and Acetone

Soluble Inks through Chromatography Abstract: Chromatography is a term used to define a set of laboratory techniques for the separation of mixtures. Through Chromatography we analyzed complex mixtures. In our recent lab we analyzed complex mixtures. The purpose of this lab was to find whether the water soluble or acetone soluble liquid traveled farther.

In our recent lab we measured the distance traveled by the different colored water and acetone soluble inks. We put three dots of water soluble ink on a piece of filter paper and four dots of acetone soluble ink at the other end. We then put the end of the filter paper in a small amount of distilled water in a beaker. The filter paper absorbed the water and the ink slowly spread to the top of the paper.

We repeated these steps for both the water soluble and acetone soluble ink but when we did the acetone soluble ink, we placed the filter paper in an acetone-water mixture instead of just distilled water. We then recorded our results which showed that water soluble inks traveled farther than the acetone soluble inks. The results of our experiment showed how each different color of water soluble inks traveled farther than any of the acetone soluble inks. Procedure: The first step of our experiment was drawing a light pencil line a half inch away from each end of the filter paper.

On the lines drawn we put four circles filled with water soluble ink. When the ink dried, we put a second drop of ink in each circle. We then put the filter paper in a 400 mL beaker filled with half an inch of distilled water. (The filter paper

was folded length wise. ) The beaker was then covered with plastic paper wrap and we watched the dots spread to the top of the paper as it absorbed the water. We then took the paper out quickly and measured the distance the ink traveled.

We then repeated these steps with the acetone soluble ink except h inch of acetone instead of distilled water. Results: The data from our experiment showed that the water soluble ink had traveled farther than the acetone soluble ink. Water Soluble Inks | Spot spot IRf | Pen Color | Identification # | Green | Distance traveled by | Water-soluble |? cms | ID | Blue | Black (8 cm distance from one pencil line to another) Acetone Soluble Inks | Permanent c ms lorange | Light Blue IIB | Dark Blue