

Drug Chemistry Section
Drug Chemistry Procedure Manual
Effective Date: August 3, 1998

Modification of C-13
Prepared By: I.L. Allcox
Approved By: I.L. Allcox
Supersedes: September 1, 1996

Name of Procedure:

Thin-Layer Chromatography
Fast Blue B Visualizing Reagent

Suggested Uses:

A visualizing reagent or detection reagent must be used in Thin-Layer Chromatography if the compound or compounds are not distinguishable by their own color. This spray reagent is primarily used to visualize cannabanoids found in marijuana. Cannabidiol gives an orange color, cannabinalol gives a violet color, and delta-9-tetrahydrocannabinol gives a red color when reacted with this reagent.

Apparatus Needed to Perform Procedure Including Preparation of Reagent:

Fume hood
Graduated cylinder
Eye protection
Balance
Laboratory coat
Gloves
Spray bottle
Air compressor
Funnel
Spatula
Bottles
Tygon or rubber tubing
Fast Blue B salt
Water

Formula for Preparing Reagent:

1. Weigh out 1 gram of Fast Blue B salt.
2. Dissolve the Fast Blue B salt in approximately 100 milliliters of water.

Formula for Preparing the Reagent (continued):

3. Place in spray reagent bottle.
4. Properly label spray reagent.

Quality Control Check:

A quality control check of this reagent will be performed using a known standard of hash and following the application procedure listed below.

Expiration Date of Chemical Reagent:

The Fast Blue B spray reagent will decompose after two weeks.

Application of Procedure on Evidence:

1. Place well-dried TLC plate in hood.
2. Activate hood.
3. Using the air compressor and spray bottle, apply a fine mist of the visualizing reagent to the TLC plate.
4. Apply the visualizing reagent until the spot corresponding to the known standard appears.
5. Compare the known standard and the compound in question for their size, shape, color and position on the TLC plate.
6. Record the results of your observation.

Safety Concerns:

Drug Chemistry Section
Drug Chemistry Procedure Manual
Effective Date: August 3, 1998

Modification of C-13
Prepared By: I.L. Allcox
Approved By: I.L. Allcox
Supersedes: September 1, 1996

Always wear eye protection, gloves, and a laboratory coat when preparing this reagent for use.

Eye protection and laboratory coat should be worn when visualizing the TLC plate.

Fast Blue B is a suspected carcinogen.

Literature References:

Randerath, Kurt, **Thin Layer Chromatography**, New York, Academic Press, 1968.

Moffat, A.C., **Clarke's Isolation and Identification of Drugs**, 2nd Ed., The Pharmaceutical Press, 1986, pp. 166-177.

This procedure has been used in the Drug Chemistry Section since 1971.