# BIOLOGICAL STAIN COMMISSION, INC.

#### PROCEDURES FOR CERTIFICATION OF DYES: GENERAL INFORMATION

#### SUBMITTING SAMPLES AND NOTIFICATION OF RESULTS:

Certification of dyes are on an individual batch or lot basis. Each batch is assigned a distinctive BSC dye code number by the Commission. For each batch of dye submitted for certification, we will need two (2) 10-gram samples and one (1) 5-gram sample in suitable containers for storage, each labeled with the name of the dye and your company batch lot number to be registered with the BSC. This provides material for testing and for permanent file in the Commission's Assay Laboratory.

We also required certain information regarding the source, amount and identity of the material. This information is to be submitted by the company on a standard BSC form provided by the Commission (sample included).

A copy of the label should also be submitted (either printed or in proof form) that it plans to affix to each bottle of dye marketed. This label should contain:

- a.) The official name of the dye
- b.) The Color Index (C.I.) number
- c.) Use for which the dye is intended
- d.) Percent dye content (the Commission will determine the percentage dye).

The time required for testing dyes is usually from 2-6 weeks. When evaluation is completed, a copy of the form will be returned to the company to indicate the results. If the dye has been found satisfactory, this form will constitute authorization to market the batch as a "Certified Dye".

## DYE TESTING AND ASSAY PROCEDURES:

Dyes are tested by different assays and staining procedures according to specific protocols outlined in D.P.Penney, J. M. Powers, M.Frank, C.Willis, C.Churukian (2002) "Analysis and testing of biological stains - The Biological Stain Commission Procedures." *Biotechnic & Histochemistry* 77(5&6): 237-275. Assay procedures may include spectrophotometric analysis, total dye content by titanous chloride titration or acid precipitation gravimetric procedures, and chromatography based on the requirements of each dye. Biological tests are based on staining performance on biological tissues by a variety of procedures that the dye is most commonly used.

### **CERTIFICATION LABEL:**

A label bearing the Commission's certification statement and the code number identifying the company and batch of dye is to be affixed by the company to each bottle of dye marketed. The company may purchase labels at any time. When ordering labels for dyes previously certified, specify the code number of the batch for which they are to be used.