



Product Information

Coomassie Brilliant Blue R-250

Product Name: Coomassie Brilliant Blue R-250

Product Code: CB0037

CAS #: 6104-59-2

Synonyms: Brilliant Indocyanine 6B, C.I. number 42660, Brilliant Blue R

Product Description

Appearance: Dark red-brown powder

Molecular Weight: 826

Molecular Formula: $C_{45}H_{44}N_3O_7S_2Na$

Extinction Coefficient: $E_{1\%}(587nm) = 785$ (methanol).

(BBI's analytical results from 14 of our past lots yielded an average of $E_{1\%}=509$ at 589 nm in ethanol)

Purity: Dye content approximately 90%

Stability / Storage As Supplied:

Recommended storage is at room temperature. The minimum shelf-life should be three to five years.

Solubility / Solution Stability:

Maximum solubilities: 70 mg/ml in water, 20 mg/ml in methyl cellosolve, and 10 mg/ml in ethanol. The solubility at 10 mg/ml in water is a dark blue-black solution.

Staining solutions at 0.25 % in 40 % methanol plus 7 % acetic acid in deionized water remain suitable for staining PAGE gels stored at room temperature for at least two months.

Usage / Applications:

Coomassie Brilliant Blue R-250 has been used for many years for staining proteins on polyacrylamide electrophoresis gels. Improvement of sensitivity and background have been accomplished using Coomassie Brilliant Blue dyes in a colloidal form. The Coomassie Brilliant Blue R-Protein complex has an absorption maximum between 560 and 575 nm. (Scanning is usually done at 570 nm.) The staining intensity of proteins may be related to the basicity of the protein involved.

Other applications for Coomassie Brilliant Blue R include use in detection of lipids in thin layer chromatography, determination of the CMC of detergents, and detection of proteins in solution, as well as on cellulose acetate plates.