

D. MONOGRAPHS

Black Currant Color

Definition Black Currant Color consists mainly of delphinidin-3-rutinoside obtained from the fruits of black currant. It may contain dextrin or lactose.

Color Value The Color Value ($E_{1\text{cm}}^{10\%}$) of Black Currant Color is not less than 40 and is in a range of 90 - 110% of the labeled value.

Description Black Currant Color is a dark red powder, viscous paste, or liquid having a slightly characteristic odor.

Identification (1) Weigh the equivalent of 1 g of Black Currant Color calculated in terms of Color Value 40 from the labeled value, dissolve in 100 ml of citrate buffer (pH 3.0). A red to red-purple color develops.

(2) Add sodium hydroxide solution (1 : 25) to the solution (1) to be alkaline. The color of the solution changes to dark green.

(3) Black Currant Color in citrate buffer (pH 3.0) exhibits an absorption maximum at a wavelength of 510 - 520nm.

Purity (1) Heavy metals Not more than 40 $\mu\text{g/g}$ as Pb (0.50g, Method 2, Control solution Lead standard solution 2.0 ml)

(2) Lead Not more than 10 $\mu\text{g/g}$ as Pb (1.0g, Method 1)

(3) Arsenic Not more than 4.0 $\mu\text{g/g}$ as As_2O_3 (0.50g, Method 3, Apparatus B)

(4) Sulfur dioxide Not more than 0.005% per Color Value

Proceed as directed under Purity (4) for Grape Skin Extract.

Color Value Test Proceed as directed under the Color Value Test under the conditions below.

Operating Conditions

Solvent Citrate buffer (pH 3.0)

Wavelength Absorption maximum at a wavelength of 510 - 520nm