mixture allowed to stand until completely separated into two layers. The amount of pyridine base layer should be 18.5 ml, minimum.  

§ 21.123 Pyronate.

Pyronate is a product of the destructive distillation of hardwood meeting the following requirements:

(a) Acidity (as acetic acid). Not more than 0.1 percent by weight, determined as follows: Add 5.0 ml sample to 100 ml distilled water in an Erlenmeyer flask and titrate with 0.1 N NaOH to a bromthymol blue endpoint.

(b) Color. The color shall be no darker than the color produced by 2.0 grams of potassium dichromate in 1 liter of water. The comparison shall be made in 4-ounce oil sample bottles viewed crosswise.

(c) Distillation range. When 100 ml are distilled not more than 5 ml shall distill below 70 °C., not less than 50 ml below 160 °C., and not less than 90 ml below 205 °C.

NOTE. Any material submitted as pyronate must agree in color, odor, taste and denaturing value with a standard sample furnished by the Alcohol and Tobacco Tax and Trade Bureau to chemists authorized to examine samples of denaturants.  

§ 21.124 Quassin.

(a) Quassin is the bitter principle of quassia wood (occurring as a mixture of two isomeric forms). It shall be a good commercial grade of purified amorphous quassin, standardized as to bitterness.

(b) Bitterness. An aqueous solution of quassin shall be distinctly bitter at a 1 to 250,000 dilution. To test: Dissolve 0.1 gram of quassin in 100 ml of 95 percent alcohol, then dilute 4 ml of the solution to 1,000 ml with distilled water, mix well and taste.

(c) Identification test. Dissolve about 0.5 gram of quassin in 10 ml of 95 percent alcohol and filter. To 5 ml of the filtrate, add 5 ml of concentrated hydrochloric acid and 1 mg of phloroglucinol and mix well. A red color develops.

(d) Optical assay. When 1 gram of quassin (in solution in a small amount of 95 percent alcohol) is dissolved in 10,000 ml of water, the absorbance of the solution in a 1 cm cell at a wavelength of 258 millimicrons shall not be less than 0.400.

(e) Solubility. When 0.5 gram of quassin is added to 25 ml of 190 proof alcohol, it shall dissolve completely.  

§ 21.125 Rubber hydrocarbon solvent.

(a) Rubber hydrocarbon solvent is a petroleum derivative.

(b) Distillation range. When 10 percent of the sample has been distilled into a graduated receiver, the thermometer shall not read more than 170 °F. nor less than 90 °F. When 90 percent has been recovered in the receiver the thermometer shall not read more than 250 °F.


§ 21.126 Safrole.

(a) Congealing point. 10.0 ° to 11.2 °C.

(b) Refractive index at 20 °C. 1.5363 to 1.5385.

(c) Specific gravity at 15 °/15 °C. 1.100 to 1.107.

(d) Odor. Characteristic odor.


§ 21.127 Shellac (refined).

(a) Arsenic content. Not more than 1.4 parts per million as determined by the Gutzeit Method (AOAC method 25.020; for incorporation by reference, see §21.6(c)).

(b) Color. White or orange.

(c) Rosin content. None when tested by the following method: Add 20 ml of absolute alcohol or glacial acetic acid (m. p. 13° to 15 °C.) to 2 grams of the shellac and thoroughly dissolve. Add 100 ml of petroleum ether and mix thoroughly. Add approximately 2 liters of water and separate a portion of the ether layer (at least 50 ml) and filter if