

## Alcohol and Tobacco Tax and Trade Bureau, Treasury

## § 21.128

by the Bureau of Alcohol, Tobacco and Firearms to chemists authorized to examine samples of denaturants.

[T.D. ATF-133, 48 FR 24673, June 2, 1983. Re-designated by T.D. ATF-442, 66 FR 12854, Mar. 1, 2001]

### § 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.

[T.D. ATF-133, 48 FR 24673, June 2, 1983. Re-designated by T.D. ATF-442, 66 FR 12854, Mar. 1, 2001]

### § 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.

[T.D. ATF-133, 48 FR 24673, June 2, 1983. Re-designated by T.D. ATF-442, 66 FR 12854, Mar. 1, 2001]

### § 21.126 Saffrole.

(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.

[T.D. ATF-133, 48 FR 24673, June 2, 1983. Re-designated by T.D. ATF-442, 66 FR 12854, Mar. 1, 2001]

### § 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 cloudy. Evaporate the petroleum ether and test as follows: Solution A—5 ml of phenol dissolved in 10 ml of carbon tetrachloride. Solution B—1 ml of bromine dissolved in 4 ml of carbon tetrachloride. To the residue obtained above add 2 ml of Solution A and transfer the mixture to a porcelain spot plate, filling one cavity. Immediately fill an adjacent cavity with solution B. Cover the plate with a watch glass and observe any color formation in Solution A. A decided purple or deep indigo blue color is an indication of the presence of rosin.

[T.D. ATF-133, 48 FR 24673, June 2, 1983. Re-designated by T.D. ATF-442, 66 FR 12854, Mar. 1, 2001]

### § 21.128 Sodium (metallic).

(a) *Color.* Silvery-white (metallic luster) when freshly cut.

(b) *Identification test.* Clean a platinum wire by dipping it in concentrated hydrochloric acid and holding it over a Bunsen burner until the flame is no longer colored. Moisten the wire loop with hydrochloric acid and dip it into the sample. Hold the wire in the Bunsen flame and note the color. Sodium produces a golden yellow flame; not observed when viewed through a cobalt glass.