

§ 21.107

(e) *Specific gravity at 25 °/25 °C.* 1.115 to 1.118.

(f) *Ester content (as diethyl phthalate).* Not less than 99 percent by weight.

NOTE. The sample taken for ester determination should be approximately 0.8 gram. The number of ml of 0.5 N potassium hydroxide used in saponification multiplied by 0.05555 indicates the number of grams of ester in the sample taken for assay.

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

§ 21.107 Ethyl acetate.

(a) *85 percent ester:*

(1) *Acidity (as acetic acid).* Not more than 0.015 percent by weight.

(2) *Color.* Colorless.

(3) *Odor.* Characteristic odor.

(4) *Ester content.* Not less than 85 percent by weight.

(5) *Specific gravity at 20 °/20 °C.* Not less than 0.882.

(6) *Distillation range.* (For applicable ASTM method, see 1980 Annual Book of ASTM Standards, Part 29, page 70, Standard No. D 302-58 (1975); for incorporation by reference, see § 21.6(b).) When 100 ml of ethyl acetate are distilled by this method, none shall distill below 70 °C., not more than 10 ml shall distill below 72 °C., and none above 80 °C.

(b) *100 percent ester:*

(1) *Acidity (as acetic acid).* Not more than 0.010 percent by weight.

(2) *Color.* Colorless.

(3) *Odor.* Characteristic odor.

(4) *Ester content.* Not less than 99 percent by weight.

(5) *Specific gravity at 20 °/20 °C.* Not less than 0.899.

(6) *Distillation range.* (For applicable ASTM method, see 1980 Annual Book of ASTM Standards, Part 29, page 433, Standard No. D 3127-77; for incorporation by reference, see § 21.6(b).) When 100 ml of ethyl acetate are distilled by this method, not more than 2 ml shall distill below 75 °C., and none above 80 °C. (760 mm).

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

§ 21.108 Ethyl ether.

(a) *Odor.* Characteristic odor.

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(b) *Specific gravity at 15.56 °/15.56 °C.* Not more than 0.728.

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

§ 21.109 Gasoline.

(a) *Distillation range.* When 100 ml of gasoline are distilled, none shall distill below 90 °F. Not more than 5 ml shall be collected below 140 °F., and not less than 50 ml shall distill below 230 °F.

(b) *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]

§ 21.110 Gasoline, unleaded.

Conforms to specifications as established by the American Society for Testing and Materials (ASTM) in the 1980 Annual Book of ASTM Standards, Part 23, page 229, Standard No. D 439-79. Any of the "seasonal and geographical" volatility classes for unleaded gasoline are considered suitable as a denaturant. (For incorporation by reference, see § 21.6(b).)

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

§ 21.111 Gentian violet.

(a) Gentian violet (methyl violet, methylrosaniline chloride) occurs as a dark green powder or crystals having metallic luster.

(b) *Arsenic content.* Not more than 15 ppm. (as As₂O₃) as determined by the applicable U.S.P. method.

(c) *Identification test.* Sprinkle about 1 mg of sample on 1 ml of sulfuric acid; it dissolves in the acid with an orange or brown-red color. When this solution is diluted cautiously with water, the color changes to brown, then to green, and finally to blue.

(d) *Insoluble matter.* Not to exceed 0.25 percent when tested by the following method:

Transfer 1.0 gram of sample to a 150 ml beaker containing 50 ml of alcohol. Stir to complete solution and filter through a weighed Whatman No. 4 filter paper. Wash residue with small amounts of alcohol totaling about 50 ml. Dry paper in oven for 30 minutes at