§21.56

- Airplane and supplementary fuels.
- Rocket and jet fuels.
- Proprietary heating fuels.
- Other fuel uses.

(2) Miscellaneous uses:

812. Product development and pilot plant uses (own use only).

§21.56 Formula No. 29.

(a) Formula. To every 100 gallons of alcohol add:

One gallon of 100 percent acetaldehyde or 5gallons of an alcohol solution of acetaldehyde containing not less than 20 percent acetaldehyde, or 1 gallon of ethyl acetate having an ester content of 100 percent, or, where approved by the appropriate TTB officer, as to material and quantity, not less than 6.8 pounds if solid, or 1 gallon if liquid, of any chemical. When material other than acetaldehyde or ethyl acetate is proposed to be used, the user shall submit an application for such use to the appropriate TTB officer. The application shall include specifications, assay methods, and an 8ounce sample of the substitute material for analysis.

- (b) Authorized uses. (1) As a raw material:
- 511. Vinegar.
- Acetic acid. 512.
- 521. Ethyl acetate.
- 522. Ethyl chloride.
- 523. Other ethyl esters.
- Ethylamines. 530.
- Dyes and intermediates. 540.
- Acetaldehyde. 551.
- Other aldehydes. 552.
- 561. Ethyl ether.
- 562. Other ethers
- 571 Ethylene dibromide.
- Ethylene gas. 572.
- 573. Xanthates.
- Drugs and medicinal chemicals. 575
- 579. Other chemicals.
- 580 Synthetic rubber.
- Synthetic resins.
 - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).
- (c) Conditions governing use. This formula is restricted to processes in which the alcohol loses its identity by being converted into other chemicals.

§21.57 Formula No. 30.

(a) Formula. To every 100 gallons of alcohol add:

Ten gallons of methyl alcohol.

- (b) Authorized uses. (1) As a solvent:
- 011. Cellulose coatings.
- Synthetic resin coatings.
- Cellulose plastics.
- Non-cellulose plastics, including resins.
- Photographic film and emulsions. 031.
- 035. Soldering flux.
- Adhesives and binders. 036.
- Solvents and thinners (other than pro-042. prietary solvents or special industrial solvents)
- 051. Polishes.
- 052. Inks (not including meat branding inks).
- 053. Stains.
- Soap and bath preparations. 142.
- Processing pectin.
- Processing other food products. 332.
- Processing crude drugs.
- 342. Processing glandular products, vitamins, hormones, and yeasts.
- 343. Processing antibiotics and vaccines.
- Processing medicinal chemicals (in-cluding alkaloids).
- Processing blood and blood products.
- 349. Miscellaneous drug processing (including manufacture of pills).

 352. Processing perfume materials and fixa-
- tives.
- 353. Processing photographic chemicals.
- 358.
- Processing other chemicals.
 Processing miscellaneous products. 359.
- 410 Disinfectants, insecticides, fungicides, and other biocides.
- 430. Sterilizing and preserving solutions.
- 440 Industrial detergents and soaps.
- 450. Cleaning solutions (including household detergents).
- 481. Photoengraving and rotogravure solutions and dyes
- 482. Other dye solutions.
- Miscellaneous solutions (including duplicating fluids).
 - (2) As a raw material:
- Drugs and medicinal chemicals.
- Organo-silicone products.
- 579. Other chemicals.
- Synthetic resins.
 - (3) As a fluid in:
- 740. Refrigerating uses.
- 750. Other fluid uses:
 - (4) Miscellaneous uses:
- 810. General laboratory and experimental use (own use only).
- 811. Laboratory reagents for sale.
- Product development and pilot plant uses (own use only).

§21.58 Formula No. 31-A.

(a) Formula. To every 100 gallons of alcohol add:

- One hundred pounds of glycerin (glycerol), U.S.P., and 20 pounds of hard soap, N.F. XI.
 - (b) Authorized uses. (1) As a solvent:
- 113. Lotions and creams (hands, face, and
- body). 131. Tooth paste and tooth powder.
- 141. Shampoos.
 - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only)

§ 21.59 Formula No. 32.

(a) Formula. To every 100 gallons of alcohol add:

Five gallons of ethyl ether.

- (b) Authorized uses. (1) As a solvent:
- 031. Photographic film and emulsions.
- 034. Cellulose intermediates and industrial collodions.
- 052. Inks (not including meat branding inks).
- 241. Collodion, U.S.P.
- 311. Ethyl cellulose compounds (dehydra-
- 332. Processing miscellaneous food prod-
- 342. Processing glandular products, vitamins, hormones, and yeasts.
- 343. Processing antibiotics and vaccines.
- 344. Processing medicinal chemicals (including alkaloids).
- 430. Sterilizing and preserving solutions.
- 481. Photoengraving and rotogravure solutions and dyes.
 - (2) As a raw material:
- 522. Ethyl chloride.
- 523 Other ethyl esters.
- Ethyl ether. 561.
- 562 Other ethers
- 571. Ethylene dibromide.
- 572 Ethylene gas.
- 575. Drugs and medicinal chemicals.
- 579. Other chemicals.
- 580. Synthetic rubber.
 - (3) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only)

§21.60 Formula No. 33.

- (a) Formula. To every 100 gallons of alcohol add:
- Thirty pounds of gentian violet or gentian violet, U.S.P.
 - (b) Authorized uses. (1) As a solvent:
- 052. Inks (not including meat branding inks).

- 210. External pharmaceuticals, not U.S.P. or N.F.
- 249. Miscellaneous external pharmaceuticals, U.S.P. or N.F.
 - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).
- (c) Conditions governing use. Meat branding inks made with Formula No. 33 do not meet U.S. Department of Agriculture meat inspection specifications for use in Federally inspected establishments. Specially denatured alcohol Formulas No. 3-A, 3-C, and 23-A are authorized for this purpose.

§21.61 Formula No. 35.

- (a) Formula. To every 100 gallons of alcohol add:
- 29.75 gallons of ethyl acetate having an ester content of 100 percent by weight or the equivalent thereof not to exceed 35 gallons of ethyl acetate with an ester content of not less than 85 percent by weight.
 - (b) Authorized uses. (1) As a solvent:
- 015. Candy glazes.
 - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only)

§ 21.62 Formula No. 35-A.

- (a) Formula. To every 100 gallons of alcohol add:
- 4.25 gallons of ethyl acetate having an ester content of 100 percent by weight or the equivalent thereof not to exceed 5 gallons of ethyl acetate with an ester content of not less than 85 percent by weight.
 - (b) Authorized uses. (1) As a solvent:
- 015. Candy glazes.

- 331. Processing pectin.332. Processing other food products.342. Processing glandular products, vitamins, hormones, and yeasts.
- 343. Processing antibiotics and vaccines.
- Processing medicinal chemicals (in-cluding alkaloids).
- 349. Miscellaneous drug processing (including manufacture of pills).
- Processing miscellaneous chemicals.
- 359. Processing miscellaneous products.
 - (2) As a raw material:
- 511. Vinegar.
- 512. Acetic acid. 521. Ethyl acetate.
- 523. Other ethyl esters.
- 590. Synthetic resins.