## § 21.50

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

## §21.50 Formula No. 25.

- (a) Formula. To every 100 gallons of alcohol add:
- Twenty pounds of iodine, U.S.P., and 15 pounds of either potassium iodide, U.S.P., or sodium iodide, U.S.P.
  - (b) Authorized uses. (1) As a solvent:
- 230. Tinctures of iodine.
- 249. Miscellaneous external pharmaceuticals, U.S.P. or N.F.
  - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).

## §21.51 Formula No. 25-A.

- (a) Formula. To every 100 gallons of alcohol add:
- A solution composed of 20 pounds of iodine, U.S.P.; 15 pounds of either potassium iodide, U.S.P., or sodium iodide, U.S.P.; and 15 pounds of water.
  - (b) Authorized uses. (1) As a solvent:
- 230. Tinctures of iodine.
- 249. Miscellaneous external pharmaceuticals, U.S.P. or N.F.
  - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).

# §21.52 Formula No. 27.

- (a) Formula. To every 100 gallons of alcohol add:
- One gallon of rosemary oil, N.F. XII, and 30 pounds of camphor, U.S.P.
  - (b) Authorized uses. (1) As a solvent:
- 210. External pharmaceuticals, not U.S.P. or N.F.
- 243. Liniments, U.S.P. or N.F.
  - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).

## §21.53 Formula No. 27-A.

- (a) Formula. To every 100 gallons of alcohol add:
- Thirty-five pounds of camphor, U.S.P., and 1 gallon of clove oil, N.F.
  - (b) Authorized uses. (1) As a solvent:
- 210. External pharmaceuticals, not U.S.P. or N.F.

- 410. Disinfectants, insecticides, fungicides, and other biocides.
  - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).

#### §21.54 Formula No. 27-B.

- (a) Formula. To every 100 gallons of alcohol add:
- One gallon of lavender oil, N.F., and 100 pounds of green soap, U.S.P.

NOTE. The requirements of this formula may be met by adding 1 gallon of lavender oil, N.F., and 66.5 pounds of U.S.P. quality soap concentrate containing 25 percent water to 100 gallons of alcohol and, after mixing, by adding thereto 33.5 pounds of water and again mixing.

- (b) Authorized uses. (1) As a solvent:
- 141. Shampoos.
- 210. External pharmaceuticals, not U.S.P. or N.F.
- 243. Liniments, U.S.P. or N.F.
- 410. Disinfectants insecticides, fungicides, and other biocides.
  - (2) Miscellaneous uses:
- 812. Product development and pilot plant uses (own use only).

# § 21.55 Formula No. 28-A.

- (a) Formula. To every 100 gallons of alcohol add:
- One gallon or any combination totaling 1 gallon of either gasoline, unleaded gasoline, heptane, or rubber hydrocarbon solvent.
  - (b) Authorized uses. (1) As a fuel:
- 611. Automobile and supplementary fuels.
- 612. Airplane and supplementary fuels.
- 613. Rocket and jet fuels.
- 620. Proprietary heating fuels.
- 630. 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 5 gallons of an alcohol solution of acetal-dehyde 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 ATF 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 ATF 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.
- 512. Acetic acid.
- Ethyl acetate. 521.
- 522. Ethyl chloride.
- 523. Other ethyl esters.
- 530. Ethylamines.
- 540 Dyes and intermediates.
- 551 Acetaldehyde.
- Other aldehydes. 552.
- 561. Ethyl ether.
- 562. Other ethers
- 571. Ethylene dibromide.
- Ethylene gas. 572.
- 573. Xanthates.
- Drugs and medicinal chemicals.
- Other chemicals.
- Synthetic rubber.
- 590. 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.
- 021. Cellulose plastics.
- Non-cellulose plastics, including resins. Photographic film and emulsions. 022.
- 035. Soldering flux.
- Adhesives and binders.
- 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.
- 331. Processing pectin.
- 332. Processing other food products.
- 341. Processing crude drugs.

- 342. Processing glandular products, vitamins, hormones, and yeasts.
- Processing antibiotics and vaccines. Processing medicinal chemicals (in-
- cluding alkaloids). Processing blood and blood products.
- 49. Miscellaneous drug processing (including manufacture of pills). 349.
- 352. Processing perfume materials and fixatives.
- 353. Processing photographic chemicals. 358. Processing other chemicals.
- Processing miscellaneous products. 359
- 410. Disinfectants, insecticides, fungicides, and other biocides.
- 430. Sterilizing and preserving solutions.
- 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.
- 576 Organo-silicone products.
- Other chemicals.
- 590. Synthetic resins.
  - (3) As a fluid in:
- 740. Refrigerating uses.
- Other fluid uses:
  - (4) Miscellaneous uses:
- 810. General laboratory and experimental use (own use only).
- 811. Laboratory reagents for sale.
- 812. 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: