U.S. PHARMACOPEIA

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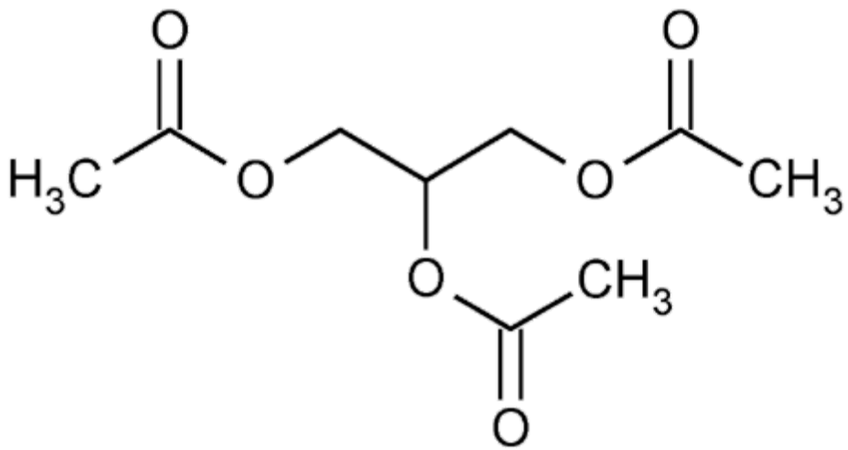
Triacetin



$C_9H_{14}O_6$ 218.21

1,2,3-Propanetriol triacetate.
Triacetin.
Glyceryl triacetate [*102-76-1*].

» Triacetin contains not less than 97.0 percent and not more than 100.5 percent of $C_9H_{14}O_6$, calculated on the anhydrous basis.

Packaging and storage— Preserve in tight containers.

USP Reference standards ⟨ 11 ⟩ **—** *USP Triacetin RS*.

Identification—

A: *Infrared Absorption* ⟨ 197F ⟩ .

B: The solution prepared as directed in the *Assay* responds to the tests for *Acetate* ⟨ 191 ⟩ .

Specific gravity ⟨ 841 ⟩ : not less than 1.152 and not more than 1.158.

Refractive index ⟨ 831 ⟩ : not less than 1.429 and not more than 1.430.

Acidity— Dilute 25 g of Triacetin, accurately weighed, with 50 mL of neutralized alcohol, add 5 drops of phenolphthalein TS, and titrate with 0.020 N sodium hydroxide: not more than 1.0 mL of 0.020 N sodium hydroxide is required for neutralization.

Water, *Method I* ⟨ 921 ⟩ : not more than 0.2% is found.

Residual solvents ⟨ 467 ⟩ **:** meets the requirements.
(Official January 1, 2007)

Assay— Transfer about 1 g of Triacetin, accurately weighed, to a 250-mL boiling flask, add 50.0 mL of 0.5 N alcoholic potassium hydroxide VS, connect the flask to a water-jacketed condenser, and reflux on a steam bath for 45 minutes, swirling frequently. Cool, add 5 drops of phenolphthalein TS, and titrate the excess alkali with 0.5 N hydrochloric acid VS. Perform a blank determination (see *Residual Titrations* under *Titrimetry* ⟨ 541 ⟩). Each mL of 0.5 N alcoholic potassium hydroxide is equivalent to 36.37 mg of $C_9H_{14}O_6$.

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