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Trifluoroacetic Anhydride,

$(F_3CCO)_2O$ 210.03 CAS RN®: 407-25-0.—Colorless liquid. Boils between 40° and 42°. Extremely volatile. Avoid exposure to air or water.

Assay: Transfer about 0.8 g, accurately weighed, to a glass-stoppered flask containing 50 mL of methanol. Add 500 mg of phenolphthalein, and titrate with 0.1 N sodium methoxide VS to a pink endpoint. Calculate A by the formula:

$$V/W$$

in which V is the volume, in mL, of 0.1 N sodium methoxide and W is the weight, in mg, of test specimen. To a second glass-stoppered flask containing 50 mL of a mixture of dimethylformamide and water (1:1) transfer 0.4 g, accurately weighed, of the specimen under test, add 500 mg of phenolphthalein, and titrate with 0.1 N sodium hydroxide VS to a pink endpoint. Calculate B by the formula:

$$V^1/W^1$$

in which V^1 is the volume, in mL, of 0.1 N sodium hydroxide and W^1 is the weight, in mg, of test specimen. Calculate the percentage of $(F_3CCO)_2O$ by the formula:

$$2100.3(B - A)$$

Not less than 97% is found. If 2A is greater than B, calculate the percentage of F_3CCOOH by the formula:

$$1140.3(2A - B)$$

Auxiliary Information - Please check for your question in the FAQs before contacting USP.

Topic/Question	Contact	Expert Committee
TRIFLUOROACETIC ANHYDRIDE	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:
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