

Status: Currently Official on 13-Feb-2025
Official Date: Official as of 01-May-2018
Document Type: USP Monographs
DocId: GUID-0776CD67-8089-40C7-BE29-EB69260A60D6_3_en-US
DOI: https://doi.org/10.31003/USPNF_M2300_03_01
DOI Ref: s5tcn

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Aluminum Subacetate Topical Solution

» Aluminum Subacetate Topical Solution yields, from each 100 mL, not less than 2.30 g and not more than 2.60 g of aluminum oxide (Al₂O₃), and not less than 5.43 g and not more than 6.13 g of acetic acid (C₂H₄O₂). It may be stabilized by the addition of not more than 0.9 percent of boric acid.

Aluminum Subacetate Topical Solution may be prepared as follows.

Aluminum Sulfate	145 g
Acetic Acid	160 mL
Calcium Carbonate	70 g
Purified Water, a sufficient quantity,	
to make	1000 mL

Dissolve the Aluminum Sulfate in 600 mL of cold water, filter the solution, and add the Calcium Carbonate gradually, in several portions, with constant stirring. Then slowly add the Acetic Acid, mix, and set the mixture aside for 24 hours. Filter the product with the aid of vacuum if necessary, returning the first portion of the filtrate to the funnel. Wash the magma on the filter with small portions of cold water, until the total filtrate measures 1000 mL.

Packaging and storage—Preserve in tight containers.

Identification—It responds to the tests for *Aluminum* and for test *B* under *Acetate* under [Identification Tests—General \(191\)](#), with a deep red color upon the addition of ferric chloride TS. This color is destroyed by the addition of a mineral acid.

pH (791): between 3.8 and 4.6.

Limit of boric acid—Proceed as directed in the test for [Limit of boric acid](#) under [Aluminum Acetate Topical Solution](#).

Assay for aluminum oxide—

Edetate disodium titrant—Prepare and standardize as directed in the Assay under [Ammonium Alum](#).

Procedure—Pipet 20 mL of Topical Solution into a 250-mL volumetric flask, add 5 mL of hydrochloric acid, dilute with water to volume, and mix. Pipet 25 mL of this dilution into a 250-mL beaker, and proceed as directed for *Procedure* in the [Assay for aluminum oxide](#) under [Aluminum Acetate Topical Solution](#), beginning with “add, in the order named.” Each mL of 0.05 M *Edetate disodium titrant* is equivalent to 2.549 mg of Al₂O₃.

Assay for acetic acid—Proceed as directed in the [Assay for acetic acid](#) under [Aluminum Acetate Topical Solution](#).

Auxiliary Information - Please [check for your question in the FAQs](#) before contacting USP.

Topic/Question	Contact	Expert Committee
ALUMINUM SUBACETATE TOPICAL SOLUTION	Documentary Standards Support	SM32020 Small Molecules 3

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:
Pharmacopeial Forum: Volume No. PF 34(2)

Current DocID: GUID-0776CD67-8089-40C7-BE29-EB69260A60D6_3_en-US

Previous DocID: GUID-0776CD67-8089-40C7-BE29-EB69260A60D6_1_en-US

DOI: https://doi.org/10.31003/USPNF_M2300_03_01

DOI ref: [s5tcn](#)