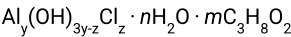


Status: Currently Official on 17-Feb-2025
Official Date: Official as of 01-Jun-2023
Document Type: USP Monographs
DocId: GUID-282DA3F1-0A91-4CE0-8044-FC9FB37467E3_5_en-US
DOI: https://doi.org/10.31003/USPNF.M2293_05_01
DOI Ref: 0dtj9

© 2025 USPC
Do not distribute

Aluminum Sesquichlorohydrate Propylene Glycol



Aluminum chlorohydroxide propylene glycol complex.

Aluminum hydroxychloride propylene glycol complex.

» Aluminum Sesquichlorohydrate Propylene Glycol consists of aluminum sesquichlorohydrate in which some of the waters of hydration have been replaced by propylene glycol. It encompasses a range of aluminum-to-chloride atomic ratios between 1.26:1 and 1.90:1. It contains not less than 90.0 percent and not more than 110.0 percent of the labeled amount of anhydrous aluminum sesquichlorohydrate.

Packaging and storage—Preserve in well-closed containers.

Labeling—The label states the content of anhydrous aluminum sesquichlorohydrate.

Identification—

A: A solution (1 in 10) responds to the tests for [Aluminum \(191\)](#) and for [Chloride \(191\)](#).

B: [Spectroscopic Identification Tests \(197\)](#), [Infrared Spectroscopy](#): 197F

Test specimen—Dissolve 0.5 g in about 40 mL of water, and while mixing adjust with 2.5 N sodium hydroxide to a pH of 9.55 ± 0.05. Filter the suspension of precipitate thus obtained. Evaporate about 15 mL of the filtrate to about 1 mL on a hot plate. Deposit this solution on a silver chloride disk.

Standard specimen: a similar preparation of propylene glycol.

pH (791): between 3.0 and 5.0, in a solution [15 in 100 (w/w)].

Change to read:

▲ [ARSENIC \(211\)](#), [Procedures, Procedure 1](#) ▲ (CN 1-Jun-2023) : 2 µg per g.

Limit of iron—Using Aluminum Sesquichlorohydrate Propylene Glycol instead of Aluminum Chlorohydrate, proceed as directed in the test for [Limit of iron](#) under [Aluminum Chlorohydrate](#). The limit is 150 µg per g.

Content of aluminum—Using Aluminum Sesquichlorohydrate Propylene Glycol instead of Aluminum Chlorohydrate, proceed as directed in the test for *Content of aluminum* under [Aluminum Chlorohydrate](#). Use the result obtained to calculate the *Aluminum/chloride atomic ratio*.

Content of chloride—Using Aluminum Sesquichlorohydrate Propylene Glycol instead of Aluminum Chlorohydrate, proceed as directed in the test for *Content of chloride* under [Aluminum Chlorohydrate](#). Use the result obtained to calculate the *Aluminum/chloride atomic ratio*.

Aluminum/chloride atomic ratio—Divide the percentage of aluminum found in the test for *Content of aluminum* by the percentage of chloride found in the test for *Content of chloride*, and multiply by 35.453/26.98, in which 35.453 and 26.98 are the atomic weights of chlorine and aluminum, respectively; the ratio is between 1.26:1 and 1.90:1.

Assay—Calculate the percentage of anhydrous aluminum sesquichlorohydrate in the Aluminum Sesquichlorohydrate Propylene Glycol by the formula:

$$Al \{ (26.98x + [17.01(3x - 1)] + 35.453) / 26.98x \}$$

in which *Al* is the percentage of aluminum found in the test for *Content of aluminum*, *x* is the aluminum/chloride atomic ratio found in the test for *Aluminum/chloride atomic ratio*, 26.98 is the atomic weight of aluminum, 17.01 is the molecular weight of the hydroxide anion (OH), and 35.453 is the atomic weight of chlorine (Cl).

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

Topic/Question	Contact	Expert Committee
ALUMINUM SESQUICHLOROHYDREX PROPYLENE GLYCOL	Documentary Standards Support	SM32020 Small Molecules 3
REFERENCE STANDARD SUPPORT	RS Technical Services RSTECH@usp.org	SM32020 Small Molecules 3

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocID: GUID-282DA3F1-0A91-4CE0-8044-FC9FB37467E3_5_en-US

DOI: https://doi.org/10.31003/USPNF_M2293_05_01

DOI ref: [0dtj9](#)

OFFICIAL