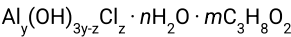


Status: Currently Official on 13-Feb-2025
Official Date: Official as of 01-Jun-2023
Document Type: USP Monographs
DocId: GUID-91A9DEB9-D2E3-48C2-8AE4-4625A4AAA22D_4_en-US
DOI: https://doi.org/10.31003/USPNF_M2068_04_01
DOI Ref: x3pn3

© 2025 USPC
Do not distribute

Aluminum Dichlorohydrax Propylene Glycol



Aluminum chlorohydroxide propylene glycol complex.
Aluminum hydroxychloride propylene glycol complex.

» Aluminum Dichlorohydrax Propylene Glycol consists of aluminum dichlorohydrate in which some of the waters of hydration have been replaced by propylene glycol.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 0.90:1 and 1.25:1. It contains not less than 90.0 percent and not more than 110.0 percent of the labeled amount of anhydrous aluminum dichlorohydrate.

Packaging and storage—Preserve in well-closed containers.
Labeling—The label states the content of anhydrous aluminum dichlorohydrate.

Identification—

A:A solution (1 in 10) responds to the tests for [Aluminum \(191\)](#) and for [Chloride \(191\)](#).
B: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: the IR absorption spectrum of a film of this solution on a silver chloride disk exhibits maxima only at the same wavelengths as that of a similar preparation of a film 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 Dichlorohydrax 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 Dichlorohydrax 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 Dichlorohydrax 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 0.90:1 and 1.25:1.
Assay—Calculate the percentage of anhydrous aluminum dichlorohydrate in the Aluminum Dichlorohydrax 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-to-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 DICHLOROHYDREX PROPYLENE GLYCOL	Documentary Standards Support	SM32020 Small Molecules 3

Chromatographic Database Information: [Chromatographic Database](#)

Most Recently Appeared In:
Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocId: GUID-91A9DEB9-D2E3-48C2-8AE4-4625A4AAA22D_4_en-US
DOI: https://doi.org/10.31003/USPNF_M2068_04_01
DOI ref: [x3pn3](#)