



>>Entry Name: Aluminium chloride hydroxide ($\text{Al}_2\text{Cl}(\text{OH})_5$)

Synonym(s): Aluminium chlorohydrate, USAN. Aluminium hydroxychloride. Basic aluminium chloride. Chlorhydrol. Astringen. Hyperdrol. Locron. Phosphonorm

CAS Registry Number: 12042-91-0

Extra CAS Registry Numbers(s): 1327-41-9 12598-07-1

$\text{Al}_2\text{Cl}(\text{OH})_5$

Molecular Formula: $\text{Al}_2\text{ClH}_5\text{O}_5$

Molecular Weight: 174.452

Accurate Mass: 173.94563

Percentage Composition: Al 30.93%; Cl 20.32%; H 2.89%; O 45.86%

Source/Synthesis: Synth. from $\text{AlCl}_3 + \text{Al}(\text{OH})_3$; formed by hydrol. of AlCl_3

Use/Importance: Used in antiperspirants

Biological Use/Importance: Antihyperphosphataemic

Physical Description: Cryst. + $2\text{H}_2\text{O}$

>>Derivative: Compd. with polyethylene glycol and propylene glycol

Synonym(s): Aluminium chlorohydrax, USAN. Rehydrol

CAS Registry Number: 53026-85-0

Extra CAS Registry Numbers(s): 173762-81-7 173762-82-8

Biological Use/Importance: Topical astringent

References:

Kohlschütter, H.W. *et al.*, *Z. Anorg. Allg. Chem.*, 1941, **248**, 319-344, (*synth*)

Brevil, H., *Ann. Chim. (Paris)*, 1965, **10**, 467-493, (*synth*)

U.S. Pat., 1974, 3 798 317; *CA*, **81**, 54331z, (*Al chlorohydrax*)

Riesgraf, D.A. *et al.*, *Appl. Spectrosc.*, 1978, **32**, 362-366, (*ir*)

Teagarden, D.L. *et al.*, *J. Pharm. Sci.*, 1981, **70**, 758-761, (*ir, Al-27 nmr, cryst struct*)