

Status: Currently Official on 15-Feb-2025
 Official Date: Official as of 01-May-2017
 Document Type: Reagents
 DocId: GUID-596BEB0F-D4B6-4009-BE40-812F630E8002_2_en-US
 DOI: https://doi.org/10.31003/USPNF_R3361_02_01
 DOI Ref: p6hf8

© 2025 USPC
 Do not distribute

0.01 M Magnesium Chloride VS

MgCl₂ · 6H₂O, 203.30
 2.0330 g in 1000 mL

Dissolve about 2.04 g of [magnesium chloride](#) in 1000 mL of freshly boiled and cooled [water](#).

Standardization: Accurately measure 25 mL of the prepared magnesium chloride solution. Add 50 mL of [water](#), 3 mL of ammonia–ammonium chloride buffer TS and 0.04 g of [eriochrome black T–sodium chloride](#) reagent. Titrate with [0.05 M edetate disodium VS](#) until the red-purple color of the solution changes to blue-purple.

$$M = \frac{(\text{mL edetate disodium VS}) \times (M \text{ edetate disodium})}{\text{mL magnesium chloride}}$$

[NOTE—If this volumetric solution is used in a qualitative application such as pH adjustment, dissolution medium, or diluent, its standardization is not required.]

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

Topic/Question	Contact	Expert Committee
0.01 M MAGNESIUM CHLORIDE VS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:
 Pharmacopeial Forum: Volume No. PF 41(6)

Current DocID: [GUID-596BEB0F-D4B6-4009-BE40-812F630E8002_2_en-US](#)
Previous DocID: [GUID-596BEB0F-D4B6-4009-BE40-812F630E8002_1_en-US](#)
DOI: https://doi.org/10.31003/USPNF_R3361_02_01
DOI ref: [p6hf8](#)