

Status: Currently Official on 14-Feb-2025
Official Date: Official Prior to 2013
Document Type: Reagents
DocId: GUID-81558454-9755-455F-B2FA-CB81238D5C6E_1_en-US
DOI: https://doi.org/10.31003/USPNF_R3000_01_01
DOI Ref: e8keg

© 2025 USPC
Do not distribute

Cobaltous Chloride CS

—Dissolve about 65 g of cobaltous chloride ($\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$) in enough of a mixture of 25 mL of hydrochloric acid and 975 mL of water to make 1000 mL. Pipet 5 mL of this solution into a 250-mL iodine flask, add 5 mL of hydrogen peroxide TS and 15 mL of sodium hydroxide solution (1 in 5), boil for 10 minutes, cool, and add 2 g of potassium iodide and 20 mL of dilute sulfuric acid (1 in 4). When the precipitate has dissolved, titrate the liberated iodine with 0.1 N sodium thiosulfate VS, adding 3 mL of starch TS as the indicator. Perform a blank determination with the same quantities of the same reagents, and make any necessary correction. Each mL of 0.1 N sodium thiosulfate is equivalent to 23.79 mg of $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$. Adjust the final volume of the solution by the addition of enough of the mixture of hydrochloric acid and water so that each mL contains 59.5 mg of $\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$.

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

Topic/Question	Contact	Expert Committee
COBALTOUS CHLORIDE CS	Margareth R.C. Marques Principal Scientific Liaison	HDQ Headquarters

Most Recently Appeared In:

Pharmacopeial Forum: Volume No. Information currently unavailable

Current DocId: [GUID-81558454-9755-455F-B2FA-CB81238D5C6E_1_en-US](#)

DOI: https://doi.org/10.31003/USPNF_R3000_01_01

DOI ref: [e8keg](#)

