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## Promazine Hydrochloride Oral Solution

» Promazine Hydrochloride Oral Solution contains not less than 95.0 percent and not more than 110.0 percent of the labeled amount of  $C_{17}H_{20}N_2S \cdot HCl$ .

**Packaging and storage**—Preserve in tight, light-resistant containers.

**USP REFERENCE STANDARDS (11)**—

[USP Promazine Hydrochloride RS](#)

[**NOTE**—Throughout the following procedures, protect test or assay specimens, the Reference Standard, and solutions containing them, by conducting the procedures without delay, under subdued light, or using low-actinic glassware.]

**Identification**—

**A:** Dilute a volume of Oral Solution, equivalent to about 50 mg of promazine hydrochloride, with 0.01 N hydrochloric acid to 25 mL, and proceed as directed under [Identification—Organic Nitrogenous Bases \(181\)](#), beginning with “Transfer the liquid to a separator”: the Oral Solution meets the requirements of the test.

**B:** It responds to [Identification](#) test **B** under [Promazine Hydrochloride](#).

**pH (791):** between 5.0 and 5.5.

**Assay**—[**NOTE**—Use low-actinic glassware.] Transfer an accurately measured volume of Oral Solution, or a quantitative dilution of it in water, equivalent to about 10 mg of promazine hydrochloride, to a 250-mL separator. Add water to adjust the volume to about 45 mL, add 3 mL of sodium hydroxide solution (1 in 10), mix, and extract the promazine with five 25-mL portions of ether. Wash the combined ether extracts with 25 mL of water, and discard the aqueous washings. Extract the combined ether extract with one 50-mL and four 25-mL portions of 0.1 N hydrochloric acid. Filter the acid extracts through a pledget of cotton washed with 0.1 N hydrochloric acid into a 250-mL volumetric flask, dilute with the same acid to volume, and mix. Without delay, concomitantly determine the absorbances of this solution and of a Standard solution of [USP Promazine Hydrochloride RS](#) in the same medium having a known concentration of about 40  $\mu$ g per mL in 1-cm cells at the wavelength of maximum absorbance at about 301 nm, with a suitable spectrophotometer, using 0.1 N hydrochloric acid as the blank. Calculate the quantity, in mg, of  $C_{17}H_{20}N_2S \cdot HCl$  in each mL of the Oral Solution taken by the formula:

$$(0.25C/V)(A_u/A_s)$$

in which C is the concentration, in  $\mu$ g per mL, of [USP Promazine Hydrochloride RS](#) in the Standard solution, V is the volume, in mL, of Oral Solution taken, and  $A_u$  and  $A_s$  are the absorbances from the assay solution and the Standard solution, respectively.

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

| Topic/Question                        | Contact   | Expert Committee          |
|---------------------------------------|---|---------------------------|
| PROMAZINE HYDROCHLORIDE ORAL SOLUTION | <a href="#">Documentary Standards Support</a>                               | SM52020 Small Molecules 5 |
| REFERENCE STANDARD SUPPORT            | RS Technical Services<br><a href="mailto:RSTECH@usp.org">RSTECH@usp.org</a> | SM52020 Small Molecules 5 |

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