

Status: Currently Official on 16-Feb-2025

Official Date: Official Prior to 2013

Document Type: USP Monographs

DocID: GUID-01148323-A305-4B3A-A816-0A08B4682E88\_1\_en-US

DOI: [https://doi.org/10.31003/USPNF\\_M52290\\_01\\_01](https://doi.org/10.31003/USPNF_M52290_01_01)

DOI Ref: 78bzk

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## Methylcellulose Tablets

» Methylcellulose Tablets contain not less than 90.0 percent and not more than 110.0 percent of the labeled amount of methylcellulose.

**Packaging and storage**—Preserve in well-closed containers.

**Identification**—

**A:** Gently add about 250 mg of the residue obtained in the Assay to the top of 25 mL of water in a beaker, and allow to disperse over the surface, tapping the top of the container to ensure an even dispersion of the test specimen. Allow the beaker to stand until the specimen becomes transparent and mucilaginous (about 5 hours), swirl the beaker to wet the remaining substance, add a stirring bar, and stir until dissolved: the mixture remains stable when an equal volume of 1 N sodium hydroxide or 1 N hydrochloric acid is added.

**B:** Heat a few mL of the solution prepared for *Identification* test A: the solution becomes cloudy, and a flaky precipitate, which redissolves as the solution cools, appears.

**C:** Pour a few mL of the solution prepared for *Identification* test A onto a glass plate, and allow the water to evaporate: a thin, self-sustaining film results.

**DISINTEGRATION (701):** 30 minutes.

**UNIFORMITY OF DOSAGE UNITS (905):** meet the requirements.

**Assay**—Weigh and finely powder not less than 20 Tablets. Weigh accurately a portion of the powder, equivalent to about 500 mg of methylcellulose, and transfer to a tared, fine fritted-glass, low-form, 30-mL crucible having a fitted crucible lid. Add 20 mL of alcohol, and macerate the solid for about 5 minutes, mixing intermittently with a glass stirring rod. Repeat the extraction with ten consecutive 10-mL portions of alcohol. Test for completeness of extraction by evaporating the last alcohol extract on a steam bath to dryness, taking up the residue in about 1 mL of water, and adding this to 5 mL of hot alkaline cupric tartrate TS (no red precipitate of cuprous oxide is formed within 5 minutes). If a precipitate is formed, continue with the alcohol extractions until the test is negative. Wash the completely extracted residue with a 10-mL portion of ether, using suction to drain off the liquid. Dry the residue in the crucible in a drying oven at 105° to constant weight. Weigh the crucible with the crucible lid in place. The weight of residue is the weight of methylcellulose present in the portion of powdered Tablets taken.

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

Topic/Question	Contact	Expert Committee
METHYLCELLULOSE TABLETS	<a href="#">Documentary Standards Support</a>	SM32020 Small Molecules 3
REFERENCE STANDARD SUPPORT	RS Technical Services <a href="mailto:RSTECH@usp.org">RSTECH@usp.org</a>	SM32020 Small Molecules 3

**Chromatographic Database Information:** [Chromatographic Database](#)

**Most Recently Appeared In:**

Pharmacopeial Forum: Volume No. PF 31(3)

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