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## Neomycin Boluses

» Neomycin Boluses contain an amount of Neomycin Sulfate equivalent to not less than 90.0 percent and not more than 125.0 percent of the labeled amount of neomycin.

**Packaging and storage**—Preserve in tight containers.

**Labeling**—Label Boluses to indicate that they are for veterinary use only.

**USP REFERENCE STANDARDS (11)**—

[USP Neomycin Sulfate RS](#)

**Identification**—Blend a Bolus with 250 mL of water. Filter a portion of the suspension obtained. If necessary, dilute a portion of the filtrate with water to obtain a test solution containing about 2 mg of neomycin per mL. Dissolve a quantity of [USP Neomycin Sulfate RS](#) in water to obtain a Standard solution containing about 2 mg of neomycin per mL. Separately apply 1  $\mu$ L of each solution to a thin-layer chromatographic plate (see [Chromatography \(621\)](#)) coated with a 0.25-mm layer of chromatographic silica gel mixture. Develop the chromatogram in a solvent system consisting of a mixture of water, butyl alcohol, glacial acetic acid, and pyridine (35:30:22:6) until the solvent front has moved about three-fourths of the length of the plate. Remove the plate from the developing chamber, mark the solvent front, and dry at about 110° for about 5 minutes. Spray the plate evenly with a solution of ninhydrin (2 mg per mL), and dry the plate at about 100° for about 5 minutes. Locate the spots on the plate: the  $R_F$  value of the principal spot in the chromatogram obtained from the test solution corresponds to that of the principal spot in the chromatogram obtained from the Standard solution.

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

**DISINTEGRATION (701)**: 60 minutes.

**Assay**—Proceed as directed for the assay of neomycin under [Antibiotics—Microbial Assays \(81\)](#), the *Test Dilution* being prepared as follows. Blend an accurately counted number of Boluses (not less than 2) at high speed in a blender jar with a sufficient accurately measured volume of *Buffer B.3* to obtain a stock solution having a convenient concentration. Dilute this stock solution quantitatively and stepwise with *Buffer B.3* to obtain a *Test Dilution* having a concentration assumed to be equal to the median dose level of the Standard.

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

| Topic/Question             | Contact   | Expert Committee                              |
|----------------------------|---|---|
| NEOMYCIN BOLUSES           | <a href="#">Kishan Chandra</a><br>Senior Scientist I, Documentary Standards | BIO42020 Biologics Monographs 4 - Antibiotics |
| REFERENCE STANDARD SUPPORT | RS Technical Services<br><a href="mailto:RSTECH@usp.org">RSTECH@usp.org</a> | BIO42020 Biologics Monographs 4 - Antibiotics |

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

**Most Recently Appeared In:**

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