

Doc. No.: QXP001	V 1.0	Title: Preparation of 5% Uranyl Acetate Solution
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Introduction

Uranium is the heaviest metal used in staining and can be used as a general contrast agent. Uranyl Acetate binds to nucleic acids, to proteins and to membranous structures.



WARNING

Uranium compounds are toxic and radioactive. Contact your safety officer or local authorities for appropriate handling and disposal protocols.



NOTE

Uranyl Acetate is sensitive to light. The procedure should be done in a dark room.

➤ **The reagents required:**

- Uranyl Acetate Powder (EMGrade)
- 1M HCl
- 0.45 µm filters
- Double distilled water

➤ **Procedure:**

1. Weigh 2g of Uranyl Acetate powder (EM Grade) into a 50 ml graduated test tube.
2. Add double distilled water to a volume of 30 ml.
3. Mix until the powder is fully dissolved. This should be done at room temperature and may take a few minutes.
4. Adjust pH to 3.5 by adding 1M HCl.
5. Add double distilled water to a final volume of 40 ml.
6. Filter through a 0.45micron filter.
7. The solution should be kept at 4 degrees C in the dark.



NOTE

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