



pH Electrode Cleaning	Identifier:	CSP-0011
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ISU Chemistry Department	Stockroom Procedure	Effective Date: 05/01/2020
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1. INTRODUCTION

This procedure provides guidance for cleaning pH electrodes in the ISU Chemistry Stockroom.

2. PRECAUTIONS AND LIMITATIONS

2.1. Silver (Ag) is listed in the Resource Conservation and Recovery Act (RCRA) and must be collected separately from other waste.

3. APPARATUS AND MATERIALS

- 3.1. Paper towels
- 3.2. Kimwipes
- 3.3. Pasteur pipettes
- 3.4. Plastic droppers

4. REAGENTS

- 4.1. Electrode fill solution, saturated with silver chloride (AgCl)
- 4.2. Electrode fill solution, no silver chloride (AgCl)
- 4.3. Deionized water

5. INSTRUCTIONS

- 5.1. Rinse exterior of electrode with deionized water.
- 5.2. Rotate the upper colored band until the fill hole aligns with the hole in the band.
- 5.3. Tip the electrode upside down and insert a Pasteur pipette into the fill hole
- 5.4. Remove the old filling solution with the Pasteur pipette
- 5.5. If crystals are visible on the interior of the electrode
 - 5.5.1. Fill electrode half full with deionized water.
 - 5.5.2. Shake, invert, and shake.
 - 5.5.3. Remove deionized water from the electrode.
 - 5.5.4. Repeat steps 5.5.1 through 5.5.3 until all crystals have dissolved.
- 5.6. Refill electrode with the appropriate fill solution.
 - 5.6.1. For electrodes with a blue band (Model 13-620-530A) use fill solution saturated with AgCl
 - 5.6.2. For electrodes with a purple band (Model 13-620-631) use fill solution with no AgCl

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- 5.7. Dispose of any fill solution containing AgCl into an appropriate RCRA waste container.
- 5.8. Dispose of any fill solution without AgCl by pouring down the drain.