*Norwich Technical High School - Electronics Technology Date Updated: 10/21/23*

*7 Mahan Drive*

*Norwich, CT 06360*

**TITLE:**

**APPROVALS:**

**Author: Matthew Ruddock, Samuel Brownell Date: 10/21/2023**

**Review: Date:**

1. **Revision History:**

| **NAME** | **REV** | **DATE** | **SUMMARY OF CHANGES** |
| --- | --- | --- | --- |
| **Matthew Ruddock, Samuel Brownell** | **A** | **10/21/2023** | **Initial Release** |
|  |  |  |  |

1. **Purpose:**
   1. Etches copper off of circuit boards, to make printed circuit boards
2. **Safety:**
   1. Wear ppe such as safety glasses
   2. Optionally wear gloves
3. **Materials**

* 2 separate glass containers
* “Acid bin”
* Acid mixer
* Scale
* Water
* Acid powder

1. **Procedure:**

| **Step** | **Procedure** | **Picture** |
| --- | --- | --- |
|  | **Measure out 6-7 cups of water in an empty container.** |  |
| 1. **T** | **Press the tare button on scale, scale scale should read 0 grams.** |  |
|  | **Measure out 500 grams of dry Ammonium persulfate in a dry separate contain** |  |
|  | **Slowly pour ammonium persulfate powder into water.** |  |
|  | **Slowly mix acid powder into water.** |  |
|  | **Keep stirring until the solution is liquid with no clumps.** |  |
|  | **Pour mixed solution into the “acid bin” for later use.** |  |
|  | **Repeat steps 1-8 if more acid is needed.** |  |
|  |  |  |
|  |  |  |
|  |  |  |