

# Safety

The person using the *ProLab CM* should read this safety section completely before beginning operation with the kit. The user should review and understand the Safety Data Sheets (SDS) for all the products being used prior to using the *ProLab CM* bench-top plating system. The “SDS” information should be kept in a location that will make them readily accessible in the event of accidental exposure or spillage of the product.

*Using your ProLab CM safely depends on following a few simple safety rules. While we have taken extensive measures to protect the user, there are several common sense rules that are important to follow in using your ProLab CM plating system.*

## **Personal Protection**

The first safety consideration is the use of proper personal protection equipment such as a face shield, safety goggles or safety glasses. Whichever you choose, it is imperative that the solution is prevented from getting into the eyes. Should this happen, the eyes should be flushed with water and medical attention received as indicated on the Safety Data Sheet for the product that caused the exposure. We recommend the use of rubber or latex gloves to prevent contact of the solutions with the skin. It is also advisable to use chemical resistant sleeves and an apron to protect clothing since it is possible that some of the solutions can damage clothing. Certain processes such as chrome stripping, electro-cleaning, activation, and some plating operations can produce corrosive vapors that may irritate the eyes, nose, throat and skin. **Use of the *ProLab CM* should be done in a well-ventilated area.** The use of a fan to disperse vapors can reduce the risk of excessive exposure to corrosive vapors.

## **Handling Chemicals Safely**

The chemicals you will be using with your *ProLab CM* plating system are serious electroplating solutions that if improperly handled could provide a significant risk to personal health and safety. The solutions are either corrosive or harmful if ingested or in some cases, both. Improper use of the solutions provided with your *ProLab CM* could lead to serious injury or death. Any of the solutions provided could be harmful or fatal if swallowed in sufficient quantities or could cause serious chemical burns to exposed skin if not washed after exposure. These solutions are intended to be used by responsible, trained adults. The person using the *ProLab CM* should read and understand this safety section before beginning operation of the *ProLab CM*. This Safety section includes the appendixes containing the Safety Data Sheets, (SDS) for the chemicals that are provided with the system. These sheets will inform you of important aspects of the chemicals that you will be using.

### **Chemical Storage Safety**

The chemicals provided with your *ProLab CM* plating system and the rinse water generated by using the *ProLab CM* must be properly stored in a secure, cool location that is not accessible to children or other un-authorized persons. **Never store any of these solutions in un-marked containers or in any container that could lead to improper use or disposal of the solutions or rinse water.** The rinse water produced by the plating operation is a hazardous material and must be collected, stored and disposed of in accordance with all local, state and federal laws. If you are unsure of the applicable laws you can check with the local water reclamation district (sanitary sewer district), local or state environmental health and/or the U.S. Environmental Protection Agency.

### **Electrical Hazard**

In the event of failure of the *ProLab CM* power supply to operate as indicated in this manual, call Gold Plating Services for recommendations on how to proceed. **Do not open the power supply or control console, there are not any user serviceable components inside. Opening the unit can revoke the warranty.**

Make sure your *ProLab CM* power supply is connected to a safe, properly wired supply outlet. If the *ProLab CM* is going to be used near fixed plumbing, we recommend that the outlet be “Ground Fault Protected”. The plating voltages are normally very low, usually less than 5 Volts direct current. However, the electrical components are connected to the supply outlet which can expose the user to dangerous voltage if the unit is connected or handled improperly.

### **Storage of Chemicals When Not in Use**

One of the most beneficial features of the *ProLab CM* is the ease in which it can be put away for short or long term storage when not in use. If you expect to use your *ProLab CM* within the next week or two. You should make sure the lids on the solution beakers cells are tight. For longer term storage of un-contaminated solutions, we recommend that you return the solutions to their original containers and seal tightly.

### **Safety Data Sheets**

The Safety Data Sheets, (SDS), for the solutions provided with your system are supplied as an appendix to this manual. If you order other chemical products, be sure to ask for the appropriate SDS. You should keep the SDS information for the chemicals you use in a location that is readily accessible to the user of the *ProLab CM*. Copies of our Safety Data Sheets (SDS) are available online at [www.goldplating.com](http://www.goldplating.com) under resources.