

**University of Tennessee Knoxville**

**Job Hazard Analysis and Personal Protective Equipment Assessment**

Instructions for Supervisors: Please review all applicable Job Hazard Analysis forms with your employee. The forms are categorized by job task.

Hazard Analysis:

**Soldering Guns/Irons**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Hazard** | **Cause** | **Prevention** |
| General Use | Inhalation | Fumes, vapors and gases generated during soldering | Properly ventilate work area, use respirator |
|  | Eye Injury | Spattering | Safety glasses w/side shields/Goggles |
|  | Skin irritation/burning | Chemical cleaner use, hot soldering iron | Review MSDS, substitute cleaner with non-toxic product, use appropriate PPE/protective  clothing |
|  | Foot Injury | Drop object on foot | Wear safety shoes |
|  | Fire | Hot soldering iron | Appropriate placed fire extinguisher, remove all combustibles and fire hazards  from soldering area |
|  | Electrical Shock | Improper operation and maintenance | Manufacturer’s instructions strictly followed, replace worn parts |
|  | Residual surface contamination Some fluxes contain toxic compounds (i.e. cadmium and  fluorides) | Soldering with lead containing solders Toxic compounds in fluxes | Wipe down work area when finished Review MSDS, substitute with nontoxic compounds if available |

**PPE Required:**

* Safety glasses w/side shields/Goggles
* Safety Shoes/Boots (for protection against dropped objects when necessary)
* Protective Clothing
* Respirators (when needed)

This document serves as the Personal Protective Equipment (PPE) Certification document required to satisfy the federal requirements of the Occupational Safety and Health Administration (OSHA) Standard, 29 CFR 1910.132 Subpart I‐ Personal Protective Equipment. This certifies that a hazard assessment of workplace hazards has been performed. Signatures for the certification are on file in the Environmental Health and Safety Department office. For questions and more information about this document, please contact EHS at 974-5084 or safety @utk.edu.

April W. Case

EHS Team Leader General Safety