

Instructions for the Use of Micro-Measurements M-Flux SS

INTRODUCTION

M-Flux SS is a corrosive acidic flux used to tin the tabs of bare K-alloy and D-alloy gages (e.g., TK gages without Option S, DD, or DP). Due to the reactive nature of M-Flux SS, it should only be used in conjunction with solid-core solders.

APPLICATION OF M-FLUX SS

M-Flux SS should only be used for tinning the tabs of the strain gage. Before the tinning operation, it is necessary to protect the grid of the strain gage from flux contamination and solder splash. Gently place a short length of paper drafting tape PDT over the grid of the strain gage, leaving only a portion of the solder tabs exposed. Minimal amounts of M-Flux SS should be used when tinning the gage tabs. This may be accomplished by dipping a length of the solder wire into the bottle of flux. Allow excess flux to drain from the wire. Tin the tip of the iron with the solder. Dip the solder into the bottle of flux again and allow it to drain. Lay the solder over one of the gage tabs and melt through the solder. Do not allow the iron to dwell on the gage tab for more than two seconds. Repeat the tinning operation on the remaining gage tabs.

REMOVING M-FLUX SS

After all of the gage tabs have been tinned, it is imperative that all traces of residual flux be removed as soon as possible. Failure to remove residual flux will result in severe gage instability. To remove the flux, scrub the freshly tinned surface with a soft brush and M-Prep Conditioner A. Blot the area dry with a clean, dry gauze sponge. Immediately scrub the surface with a soft brush and M-Prep Neutralizer 5A, and repeat the blotting procedure. To prevent the generation of steam, which may damage the gage, allow the installation to air-dry 3-5 minutes prior to attaching leadwires.

INSTALLING LEADWIRES

Once the gage tabs have been tinned, leadwires may be attached with rosin core solder or solid core solder and M-Flux AR. Do not use M-Flux SS to attach leadwires. With leadwires attached, remove all traces of the rosin flux with RSK Rosin Solvent. The rosin solvent will also dissolve the mastic of the paper drafting tape used to protect the grids. Once the drafting tape has been removed and the residual flux has been brought into suspension in the rosin solvent, blot the area dry with a clean, dry gauze sponge.

Precautionary Information

M-Flux SS is a corrosive material and must be handled with extreme caution. Avoid contact with skin and mucous membranes. Eye protection, such as a full-face shield or chemical splash goggles **MUST** be worn. If eye contact occurs, flush with copious amounts of water for at least 15 minutes. Seek medical attention as soon as possible. Rubber gloves and aprons are recommended. If skin contact occurs, immediately wash the affected area with soap and warm water. Do not inhale fumes. Use only in well-ventilated areas. In case of overexposure, move the patient to fresh air. Apply artificial respiration if the patient has stopped breathing. In case of accidental ingestion, **DO NOT** induce vomiting. If the patient is conscious, give large amounts of lime water or milk of magnesia. If these are not available, give the patient plenty of water. Get medical attention as soon as possible. For additional health and safety information, consult the Materials Safety Data Sheet.

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