



**For best results using SWS-FLUX-1,
specialized orbital welder training
is highly recommended.**

For more information about this training
or other welder training, contact
your Swagelok representative.

www.swagelok.com

Patent Pending Duplex process
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Mixing and Usage Instructions for SWS-FLUX-1

*with Swagelok Welding System
Orbital Welding Equipment*

1. Follow proper orbital welding procedures.
2. Mix SWS-FLUX-1 with acetone or isopropyl alcohol (IPA), typically in a 1:1 weight ratio, to produce a paint-like consistency. Follow chemical manufacturer's instructions for handling these chemicals.

Note: The flux mixture will thicken over time as the acetone or IPA evaporates. Add more acetone or IPA as needed to return the mixture to the proper consistency. Once you have mixed the flux powder initially, use the same mixing agent for any additional thinning required. Do not mix acetone with IPA.

3. Using the small brush provided, apply flux to only the outside surface of the tubes where the tubes meet. Avoid getting flux on the end of the tubes to be butted together. The layer should be thick enough to prevent visual observation of the surfaces to be welded. The layer should be about the width of the brush.
4. Weld through the flux layer, maintaining an arc length of approximately 0.050 in. (1.3 mm).
5. SWS-FLUX-1 does not replace the use of adequate shielding or backing gases. The shielding gas must be pure argon.
6. After welding, any unconsumed flux can be removed with a wire brush. Flux that has been consumed in the weld creates a tenacious layer. This layer may be removed with an aggressive mechanical method if desired.