



# Technical Bulletin

JOHNSON MANUFACTURING COMPANY  
Princeton, Iowa 52768-0096

## JOHNSON'S ALUMASOL SOLDERING FLUX Part No. 48-50 Series

### DESCRIPTION:

Johnson's ALUMASOL Organic Soldering Flux is an excellent amine-based flux containing fluorides which are most effective for soldering aluminum, as well as other metals. When heated, this viscous liquid flux becomes active well before the melting point of most solders. Continued heating to approximately 550 degrees F enables the removal of even tough aluminum oxides, and promotes strong solder bonds. However, extending the time and/or temperature much beyond this point will cause ALUMASOL to begin charring, thereby reducing its effectiveness.

ALUMASOL Flux may be classified as an "organic flux" as its constituents are usually rendered inactive by the end of the heating cycle during a normal soldering process. This lessens the chance for corrosion of the workpiece down the road. Even so, it is recommended that excess flux and residues always be removed from the workpiece, when possible.

ALUMASOL Flux may be used with a wide variety of solders, including Johnson's Alumaweld tin-zinc alloys, lead-free alloys for special applications, or tin-lead solders such as 60/40, and 50/50, as well as, lead-tin-silver alloys like #435, designed to reduce galvanic corrosion between aluminum and dissimilar metals. This flux also serves as a basis for Johnson's AL-300 Organic Flux Cored Solder for Aluminum, as well as our specially engineered Paste Solders containing up to 90% metal content for syringe applications.

### PHYSICAL DATA:

Specific Gravity	1.3 - 1.4 @ 60F
pH	Alkaline
Solubility in Water	100%
Appearance	Amber Viscous Liquid
Odor	Ammonia

### USAGE:

Johnson's ALUMASOL Flux is quite viscous, therefore it may need to be thinned with just a little water for some applications.

### HANDLING:

Johnson's ALUMASOL Flux contains, among other things, amines and complex fluoride compounds. Avoid breathing any fumes generated during the soldering process. Wear gloves, protective clothing and eye wear when handling flux. Store, mix and use in non-metallic containers only. Refer to the *OSHA Material Safety Data Sheet* for additional information before using this flux.



TO ORDER CALL (800) 747-0030, FOR TECH SUPPORT CALL (563) 289-5123, TO SEND FAX (563) 289-3825

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**WASTE DISPOSAL:**

Johnson's ALUMASOL Flux must be neutralized before discharging into the sewer. Beyond this, we cannot make specific recommendations due to variations in local laws and regulations.