



Technical Bulletin

JOHNSON MANUFACTURING COMPANY

Princeton, Iowa 52768-0096

JOHNSON'S NO. 5117 MILD ORGANIC FLUX Part No. 46-00 Series

DESCRIPTION:

Johnson's No. 5117 Mild Organic Flux is a mild solution of free halides that is very effective for soldering copper, brass, tin plate and other easy-to-solder metals. During the soldering process, its water soluble residues are nearly completely neutralized and decomposed, leaving little chance of corrosion behind on the work piece. This process is achieved however, only when using the proper time/temperature relationship. Even though these residues are minimal in both quantity and activity, never-the-less, we recommend that they be removed with lukewarm water to prevent staining of the surfaces. Johnson's No. 5117 has been found to be particularly useful for production soldering of stained glass lamps, for dip soldering wire harnesses and cable ends, for soldering architectural copper roofing, for electrical connections, and for many other applications.

PHYSICAL DATA:

Specific Gravity	1.062 ± .005 @ 60° F As Supplied
pH	1.1 As Supplied, 3.5-4 When Diluted
Solubility in Water	100%
Appearance	Clear Liquid
Odor	Slight Pine Oil Scent

USAGE:

For best results when dip soldering, a dilution of 1:1 to 2:1 with clean water is suggested. For soldering with a torch or iron, Johnson's No. 5117 may be used straight (no dilution). Care should be taken to apply flux only to surfaces that will be heated to full soldering temperature which will volatilize the flux, leaving little or no active residues behind on the workpiece. Additional data and/or application assistance is available from Johnson's Technical Support Group.

HANDLING:

Since Johnson's No. 5117 contains organic acid, it should be stored, mixed and used in non-metallic containers only. Wear protective clothing and eye wear when handling any flux. Avoid mixing other chemicals with this, or any flux. Please refer to the *OSHA Material Safety Data Sheet* for additional information.

WASTE DISPOSAL:

Spent flux should be neutralized with soda ash or lime before disposal. Further treatment may be required to remove heavy metals dissolved in this flux during use. Beyond this we cannot make specific recommendations because local laws vary.



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