Technical Bulletin

JOHNSON MANUFACTURING COMPANY
Princeton, Iowa 52768-0096

JOHNSON'S SOLDERING FLUID
Part No. 01-00 Series

DESCRIPTION:

Johnson's Soldering Fluid is a general purpose, concentrated, inorganic soldering flux with no free acid content. Makes solder flow into place and hold at lower temperatures and tolerates high heat without burning away. Johnson's Soldering Fluid may be diluted with water for many jobs. It handles the toughest soldering and has extra power when applied to heated metal.

PHYSICAL DATA:

pH	**3-4 (This slightly low pH results from chemical salts in solution, not free acid content in the flux)**
Specific Gravity	**1.401 ± .005 @ 60° F (As Shipped)** **1.124 ± .01 @ 60° F (Diluted with 3 parts water)**
Appearance	**Color May Vary From Clear To Rusty Liquid**
Odor	**Slight Wintergreen**

USAGE:

For best results, use the least amount of flux required. On clean and easy to solder metals, mix one or two parts of clean water with one part of flux. In many cases, further dilution is practical. Determine dilution by performing soldering tests.

Johnson's Soldering Fluid will not change with age. If some water evaporates in an open container, any crystals that may form will redissolve by stirring in small amounts of water and this will bring the fluid back to normal.

Any method of heating for soldering may be used with this flux. Some of the common heating means include torch, open flame burner, soldering iron, hot plates, oven, induction, resistance heating, quartz lamp or hot liquid or gas.

Some applications for Johnson's Soldering Fluid are for soldering steel, copper, brass, iron, tinplate, terne metal, zinc coated steel, pewter, cast iron, and others.

Production tinning operations that use solder or pure tin like this flux. Large quantities are used for sheet metal soldering, auto radiator soldering by torch and solder pot, the tinning of brass strip and solder filling of auto body steel.

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After soldering, wash off all flux residues with water. Warm or hot water works much faster than cold. A mildly acid cleaner (for example, 1 to 2 percent hydrochloric acid in a water solution) dissolves flux residues better than a neutral or base cleaner. Use care however, not to expose parts to stronger acid mixtures or long cleaning cycles as plating may cause new solder joints to darken. Scrubbing with a brush, agitation in a tank, high pressure water or the use of stream all speed the job of flux removal. Do not merely attempt to neutralize these residues; when doing body work all residues must be completely removed before finish sanding and painting.

HANDLING:

Wear protective clothing and eye wear when handling this flux. Please refer to the *OSHA Material Safety Data Sheet* for additional information. Store, mix, and use in non-metallic containers only.

WASTE DISPOSAL:

We cannot make specific recommendations due to variations in local laws.