

Kester Inorganic Acid Fluxes 541, 715, 751, 817

General Information

Kester Inorganic Acid Fluxes are strong, water-based formulations having outstanding cleaning and fluxing action. They are recommended for use as general-purpose fluxes for difficult-to-solder metals. Normal flux application procedures can be used, and soldering can be done with an iron, torch, oven, induction coil or resistance tool.

Selection of Type

Flux selection is based on the type of metal being soldered, the type of salt used in the flux, and flux activity.

541 - This is a strongly acid, zinc-free flux that has the ability to solder badly oxidized metals while leaving a minimum of corrosive residue after soldering.

715 - The standard all-purpose flux for general soldering, this formula has high activity, stability and heat resistance. Rapid soldering can be accomplished on most metals using this flux.

751 – This is a high zinc chloride concentration flux for general soldering. This formula has high activity, great heat stability and heat resistance.

817 - The most active flux in this series, 817 can be used for soldering all common metals except aluminum and magnesium. This flux is also the most corrosive of these formulations and should be used only when exceptional activity is required.

Residue Removal

Because of the high degree of activity of these fluxes, corrosive residues may be left after soldering. A hot water rinse, followed by drying to remove the water, is usually sufficient to remove these residues. In cases where a hot water rinse is not sufficient, the residues can be removed by using a 1% solution of hydrochloric acid, followed by a clean water rinse. As before, drying is recommended after the final rinse.

Properties

| <u>Flux</u> | <u>Specific Gravity</u> | <u>% Free Acid</u> |
|-------------|-------------------------|--------------------|
| 541 | 1.098 | 5.7% |
| 715 | 1.512 | 0.3% |
| 751 | 1.450 | 3.4% |
| 817 | 1.422 | 4.9% |

Shipping & Storage

Kester Inorganic Acid Fluxes are supplied in non-returnable one, five and fifty-three gallon containers. The fluxes should be stored at temperatures between -10°C (14°F) and 35°C (95°F). Their shelf life in closed containers is 3 years.

Preparation & Handling

Mix well if diluting. Once thoroughly mixed, the solutions will not separate on standing.

Since these fluxes attack many metals, they should be mixed and kept in polyethylene, PVC or fiberglass reinforced polyester containers at all times. Machinery or construction materials, which might be exposed to direct contact with the fluxes, should also be able to withstand acids.

Health & Safety

These products, during handling or use, may be hazardous to health or the environment. Read the Material Safety Data Sheet and warning label before using these products.

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