



ACT 4040

Solder / Tin Stripper

I. Description

ACT 4040 is specially formulated to strip tin-lead (solder) and tin deposits from copper circuits on printed circuit boards. The bath is highly stable and reliable, and contains no toxic fluorides, fluoborates, or peroxides. Operating at room temperature, ACT 4040 will rapidly dissolve these deposits, and will also dissolve molten solder deposits and cleans tabs for re-soldering. ACT 4040 is highly recommended for use in general electronic and printed circuit board fabrication operations. It can be used to ensure a clean, solder free surface for subsequent plating and other processing operations. ACT 4040 is one of a new generation of environmentally friendly products. All of the components are biodegradable, easily waste treated, and are as safe as current technology allows.

II. Operating Parameters

Make-up	100%
Temperature	70 - 95° F (24 - 35 ° C)
Immersion Time	2 - 4 minutes
Process	Dip tank or conveyORIZED
Agitation	Recommended to increase stripping speed
Ventilation	Recommended
Tanks	HD polypropylene, PVC, or fiberglass
Racks and Baskets	Nonmetallic or coated with plastisol
Heaters	Teflon coated or glass heaters

III. Physical Properties

Specific gravity	1.19 – 1.21
Appearance	yellow liquid
pH	<1.0
Odor	nitric acid
Flash Point	> 200 F

IV. Control Procedures

1. Stripping times of 2 - 4 minutes are typical for 0.3 mil (7.5 micron) 63/37 tin-lead solder.
2. ACT 4040 can dissolve up to 70 - 80 g/L of solder.
3. Parts must be cleaned / degreased with an alkaline cleaner or solvent before immersion in ACT 4040.
4. Do not allow stripped parts to remain in the ACT 4040 working bath after stripping. Copper will slowly dissolve and reduce the efficiency of the ACT 4040 bath.

5. The bath cannot be controlled by analysis. Control is by visual observation of stripping. If stripping begins to slow to an unacceptable rate, the bath can be heated to 90°. Partial adds of 10-20% of ACT 4040 may be made.
6. Specific gravity controllers should be set to control the working strip solution at 1.25 – 1.27.

V. Analysis

Analysis is not required to use this product.

VI. Safety and Storage

ACT 4040 is highly acidic. Do not get in eyes, skin, or clothing. Do not inhale or swallow. Eye contact can cause severe damage. Use with adequate ventilation and proper protective equipment. Rubber gloves and chemical safety glasses are recommended. Do not eat or drink while handling these products, and wash thoroughly after using them. Eyes - flush with warm water for 15 minutes. Call a physician for treatment. Skin - flush thoroughly with water. Inhalation - remove patient to fresh air and consult a physician. If swallowed, do not induce vomiting. Consult a physician for any further treatment.

ACT 4040 concentrates should be stored between 10 and 37°C (50 and 100°F). Do not store in direct sunlight. If stored at low temperatures for long periods, some components may crystallize from solution. Do not use that material unless all components have re-dissolved and have been mixed completely. Do not store ACT 4040 in contact with alkaline materials or strong reducers or combustible materials. Keep containers closed when not in use. Do not cross contaminate containers; always use clean scoops, buckets, and pumps. In case of spill, neutralize ACT 4040 with sodium bicarbonate and flush to drain. In case of spills of ACT 4040 working bath, cover with absorbent inert material, then scoop up the material for disposal of the lead-containing material in a legal manner.

VII. Waste Treatment

Used ACT 4040 is easily treated but is most often sent to a reclaimer for recovery and recycling of the metals. Consult with local officials for waste disposal regulations. Please ask a Florida CirTech technical sales rep. for more information regarding waste treatment of this chemistry and our complete line of waste treatment chemistry if additional help or information is desired.

VIII. Miscellaneous

Available in 15-gallon carboys and 55 gallon drums. Consult MSDS for additional information.

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