



# RADEX® #140 FLUX

- LOW RESIDUE - Rinsing is not needed.**
- BRIGHT METAL - Brighteners or cleaners are not needed.**
- NON-CORROSIVE - No green corrosion or pin holes.**
- STRONG JOINTS - Reduces rejects and repair costs.**
- HIGHLY CONCENTRATED - Less storage space. Low use cost.**

Radex® #140 flux is an organic compound of hydrobromic acid specifically designed for the oven tinning and soldering of copper, brass and steel components. This product meets the radiator core manufacturer's requirements for a volatile baking flux which leaves no residue after heating. This is what is commonly called "low residue" or "non-corrosive" flux. Radex® #140 flux is volatile at the lowest temperature and is the most completely volatile of all of Damon's fluxes. It contains a superior wetting agent that lets the solder penetrate and flow into the tightest seams and joints. It is being used successfully for oven core and heat exchanger baking, tinning brass stock for tubes, in tube mills and for dipping headers.

### OVEN BAKING

Start with a water dilution of 1 to 8 (3° Bé. specific gravity). This may be varied depending on your actual conditions. Generally, as temperature or time is increased the dilution should decrease (less water).

In actual use the piece is dipped into or sprayed with the diluted flux.

The excess flux is blown or shaken off and the

piece is baked in a vented oven for 2 to 30 minutes at 550° F to 1050° F. (Radiator cores use about 3 minutes at 590° F.) The time and temperature depends on the solder alloy and gauge of metals used. Adjustment should be made to give a bright metal surface. If the core is too dark or black this indicates the flux is too strong, the temperature is too high, or the time is too long. If the solder bond is poor this indicates the flux is too dilute, the temperature is too low, or the time is too short. Finished work should be covered to avoid exposure to light, which will darken the copper.

As water evaporates from the flux tank the flux becomes stronger. The flux should be tested daily and enough water added to keep the specific gravity correct. Use a Hydrometer and/or Acid Test Kit to control daily additions of water and flux.

Contains no hydrazine or hydrazine compounds.

**PHYSICAL DATA:** Color: Green Odor: Mild Acidic

**PACKAGING:** 55 gallon plastic drums

## Dilutions:

### RADIATOR CORE BAKING

Copper & brass only, or when solder foil is used to bond steel side channels, etc.....

| <u>Flux: Water</u> | <u>Hydrometer</u> |
|--------------------|-------------------|
| 1:8                | 3°                |

When steel side channels are bonded only by the solder already on the tubes.....

|     |    |
|-----|----|
| 1:6 | 4° |
|-----|----|

### HEADER DIPPING

Punched with a water soluble oil.....  
Punched with a non-water soluble oil.....

|     |       |
|-----|-------|
| 1:2 | 8.5°  |
| 1:1 | 12.5° |

TUBE MILLS OR TINNING BRASS STOCK.....

|         |          |
|---------|----------|
| 1:3-1:4 | 6.5-5.4° |
|---------|----------|

FACE DIPPING.....

|     |      |
|-----|------|
| 1:4 | 5.4° |
|-----|------|

HEATER CORES.....

|         |          |
|---------|----------|
| 1:4-1:6 | 5.4-4.0° |
|---------|----------|

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