



# NC280



## No-Clean Liquid Rework Flux

### Features:

- Passes SIR in Raw State
- Low-Residue
- Extremely Safe for Rework
- Halide-Free
- Wide Process Window
- Can be Foamed, Sprayed, Misted or Dipped
- Excellent Wetting
- Lead-Free Compatible

### Description:

NC280 is a low- to medium-solids, no-clean liquid flux formulated to leave minimal post-process residues that are pin testable without cleaning. NC280 offers an excellent activity level with good performance on bare copper, solder coated and organic coated PWBs, leaving negligible post-process residues that are non-conductive and do not require post-process cleaning. NC280 is safe to be left on the circuit board and passes SIR in the raw state. NC280 is extremely safe for rework, palletized wave soldering and point-to-point selective soldering. NC280 has a unique chemistry and a wide process window, making it a drop-in for most no-clean and RMA wave soldering operations, including lead-free wave soldering.

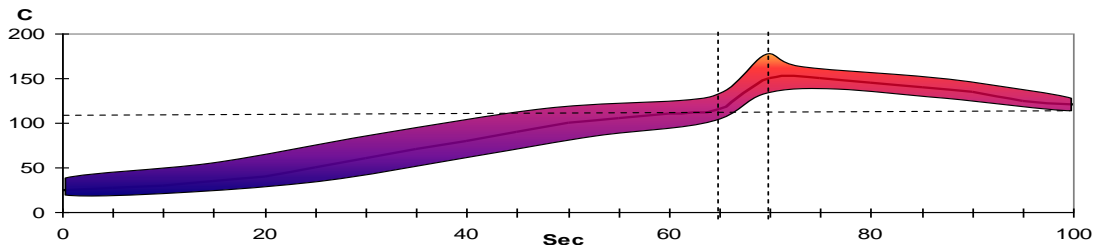
### Application:

- NC280 is formulated for application via spray, foam, brush, mist, or dip. For spraying, NC280 is ready to use directly from its container, no thinning required. When spray fluxing, it is imperative that proper flux coverage and uniformity be achieved and maintained. A dry flux coating of 500-1500 micrograms per square inch is recommended as a starting point.
- When foaming, air stones should be supplied with compressed air, free of oil and moisture. Adjust foam head to achieve uniform bubble size for optimum coverage. During foaming applications, it is periodically necessary to add AIM's Common Flux Thinner to replace that which is lost due through evaporation.
- Monitoring and controlling the acid number is recommended for maintaining the flux composition. The acid number should be maintained to approximately 12.82 MG KOH/GRAM.

### Process Control:

Because of the low percentage of solids in this flux, control of specific gravity with automated equipment usually is found to be ineffective; therefore, control via titration is necessary. AIM's Titration Kit has proven to be cost-effective, user friendly, quick and accurate. Titration should be carried out at least once an hour for flux foaming operations, or more often if large variances are found. Specific gravity should be carefully maintained at  $.79 \pm .01$ .

### Thermal Profile:



<b>RATE of RISE</b> 2-3 °C / SEC MAX	<b>PROGRESS THROUGH</b> 66°C - 77°C ( 150 - 170°F )	<b>PCB TOP SIDE TEMP</b> 87°C - 115°C ( 190°F - 240°F )	<b>COOLDOWN</b> ≤ 4°C
	≤ 40 SECONDS	JUST BEFORE WAVE	

### Cleaning:

NC280 can be cleaned, if necessary, with saponified water or an appropriate solvent cleaner. Please refer to the AIM No-Clean-Cleaner Matrix for a list of suitable cleaning materials.

### Handling:

- NC280 has an unopened shelf life of 1 year when stored at room temperature.
- Do not store near fire or flame. Keep away from sunlight as it may degrade product.
- NC280 is shipped ready-to-use, no mixing necessary.
- Do not mix used and unused chemical in the same container.
- Reseal any opened containers.

### Safety:

- Use with adequate ventilation and proper personal protective equipment.
- Refer to the accompanying Material Safety Data Sheet for any specific emergency information.
- Do not dispose of any hazardous materials in non-approved containers.

### Physical Properties:

Parameter	Value
J-STD-004	ROLO
Visual	Light Yellow
Odor	Aromatic (Slightly)
Solids Content	5.4%
Acid Number	12.82 mg KOH per gram flux

Parameter	Value
Specific Gravity	0.79 (water = 1)
Flash Point	12°C
Boiling Point	80°C
pH (1% solution /water)	Acidic

### Corrosion Testing:

Parameter	Requirements	Results
Copper Mirror (24 hrs @ 25°C, 50%RH)	IPC-TM-650-2.3.32	Low
Halide Test (Silver Chromate)	IPC-TM-650-2.2.33	Pass

### Raw Flux Surface Insulation Resistance Results:

