

# NC26 – Tacky Flux

## GENERAL DESCRIPTION

NC26 BGA FLUX GEL is a No Clean tacky dispensing flux ideally suited for BGA and surface mount component repairs. It leaves a clear colorless residue which does not require cleaning. This product is completely halogen free. NC26 is designed for a wide range of temperature and humidity conditions with a stencil life greater than 8 hours.

## KEY ADVANTAGES

- Stable product with long stencil life
- Excellent printing characteristics
- Suitable for dispensing, stencil printing, and pin transfer
- Excellent SMT rework flux offering bright shiny solder joints with clear probable residue
- Excellent wetting on all surface finishes
- Classified as ROL0 per J-STD-004
- **HALOGEN FREE**

## STORAGE AND HANDLING

Refrigeration is the recommended storage condition to maintain consistent viscosity, reflow characteristics and overall performance. Shelf life is 9 months from date of manufacture when handled properly.

## STANDARD PRODUCT AVAILABILITY

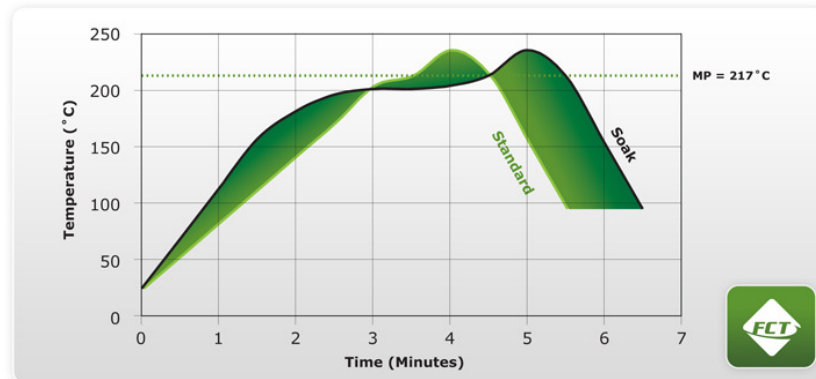
UNIT OF MEASURE
10cc and 30cc Syringe
75cc and 150cc Jar

## PHYSICAL PROPERTIES

Physical Properties	Values
Flux Type Classification	ROL0
Acid Number (mgKOH/gm)	135 – 150
Color	White/Cream
Copper Mirror	Low activity
Halogen Content	0.00%
Silver Chromate	No halides
Fluoride test	None detected
Ion Chromatography	Zero halides
Solids Content	70 +/- 2%
Corrosion	Pass
SIR	Pass
Electromigration	Pass

## MATERIAL SAFETY DATA SHEETS

Material Safety Data Sheets (MSDS) are available online at [www.fctassembly.com](http://www.fctassembly.com)



### RECOMMENDED REFLOW PROFILE

The recommendations apply to most lead free alloys in the SAC alloy system. This can be used as a general guideline in establishing a reflow profile when using **NC26**. Deviations from these recommendations are acceptable and may be necessary, based on specific process requirements including board size, thickness and other process characteristics. Please add 7-10C when using Sn100 based solder paste.

### REFLOW

A peak temperature of 12-45 C above the melting point of the alloy is recommended for optimum results. A time above liquidus (TAL) of 30 to 90 seconds should also be used. Excessive temperature or excessive TAL may result in excessive Intermetallic Compound (SnCu-IMC) formation, which can adversely affect solder joint and long term reliability.

### HEATING

A linear ramp of 0.5 to 2 C/sec is suggested to gradually remove the solvents and other volatile components in the solder paste. This also helps in minimizing solder balls, beading and bridging from hot slump.

A linear ramp also helps minimize depletion of flux activity which can happen at extended times above the liquidus (TAL) and at very high reflow temperatures.

A profile with a soak between 200-210C for less than 20 seconds can be used to reduce void formation on BGA and CSP devices.

A short 20-30 second soak below the melting point of the solder can be used to help minimize tombstoning.

### APPLICATIONS AND METHODS

NC26 Tacky Flux is designed for stencil printing, pin transfer, dot dispensing and syringe applications. This flux can be used as a tack and flux vehicle for soldering components to a solid solder deposit, or precision pad technology board surface. It also is designed for rework applications on all PCB surface finishes. NC26 Tacky Flux can be used in BGA sphere attachment or for repair and reballing. It can also be used on flip chip, chip scale package and flip chip bumping site assemblies as a soldering flux.

### CLEANING

NC26 is a no clean chemistry thus the residues do not need to be removed. If residue removal is required we suggest the following Kyzen products:

Cleaning Agent	Wash Concentration
Aquanox A4241	15-20%
Aquanox A4520	15-20%
Aquanox A4625	15-20%
Aquanox A4633	10%