Cobar-OT2-SCANGe071-T3/T4

Description product

The **Cobar-OT2-SCANGe071** is a next generation lead-free solder paste. The SCAN-Ge071 alloy is a low silver alloy with a small melting range 217 – 224 °C (which makes it very suitable for nitrogen reflow and vapor phase applications).

Alloy SCANGe071 stands for the alloy composition Sn98.3.Cu0.7Ag1.0Ni0.05Ge0.005.. Since SCANGe071 is non-eutectic, the solder has a matt appearance. The flux system is halogen and halide free.

See the Product Data Sheet (PDS) for the specification of the product concerned. Read the Material Safety Data Sheet (MSDS) before handling and/or using this product.

Receiving and storage

After receiving the solder paste it should be unpacked and stored. **DO NOT** store the paste in a fridge or at temperatures lower than 8 °C. Leave the jars sealed at room temperature until use.

Cartridges should be stored in a horizontal position. To eliminate flux segregation it is advised to rotate the cartridges once a month.

Handling

Allow the jars and their contents to reach the ambient temperature at the printer before use. DO NOT open cold containers as moisture may condense on the product and affect performance. Do not place it on a hot plate, furnace, reflow oven or any other artificial means to warm.

Stir the material for 1 minute with a steel spatula (or equivalent). This practice homogenizes the product and prepares it for immediate test.

Solder paste is a shelf-life item and should be managed as a FIFO-supply. DO NOT store new and used paste in the same container. Keep the jars tightly sealed when not used.

Print recommendations

Use a squeegee with a minimum necessary length. Recommended is to have 25 mm (1 “) on both sides of the print pattern. Apply 10 gram/cm of squeegee length on the stencil.
The stroke of the squeegee should start and end 50 mm (2”) before/after print pattern to allow the paste to roll properly.
Printer settings depend on print equipment, stencil materials and temperature. General recommended settings:

Print speed [mm/s]	Squeegee pressure [kg/cm] @ 23 ºC
25 – 100	0.20 (0.50 kg/inch)
100 – 200	0.25 (0.65 kg/inch)

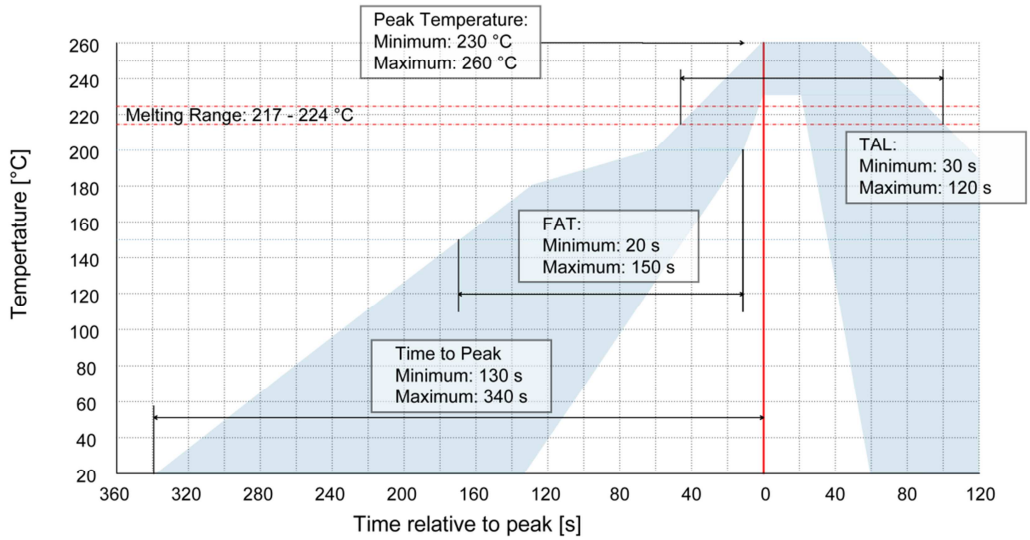
Decrease pressure by 5% per 1 ºC higher temperature.
For typical PCB’s: separation speed 10 mm/s. For the MPM machines step 6 of slow-mode.
Recommended operating temperature is between 22-28 ºC and 30-70 %RH.
In case no printing has been done for more than four hours, it is highly recommended to perform a total stencil cleaning prior to re-start.

Tack time

It is recommended to place components and reflow the assembly no longer than 24 hours after printing.

Reflow profile

The printed boards can be reflowed up to 24 hours after printing without adverse effects. The recommended profile can only be considered as a guideline for the initial setting of the equipment.



FAT = Flux Activation Time (time between 150 and 200 °C)

TAL = Time Above Liquidus (time above 224 °C)

Tp = Peak Temperature (maximum temperature)

NOTE:

Although the solder paste has a very wide process window a linear reflow profile is preferred incase of poor wettable components/board finishes.

For vapour phase or inert reflow soldering a longer soak and/or time above liquidus are less critical.

Residues/cleaning

Cobar-OT2-SCANGe071 is a no-clean formula. Residues that remain on the assembly after soldering are chemically inert and not meant to be cleaned. Te residues on the PBA can however be cleaned with Cobar MCA-1424 Aqueous cleaner.

The residues on stencil, spatulas and other tools as well as misprints may be cleaned with cleaner MCI-2330.