KOKI
CHALLENGING NEW TECHNOLOGIES

Halogen free solder paste for automotive application

S3X58-M555 Sn 3.0Ag 0.5Cu

New generation Halogen Free Technology

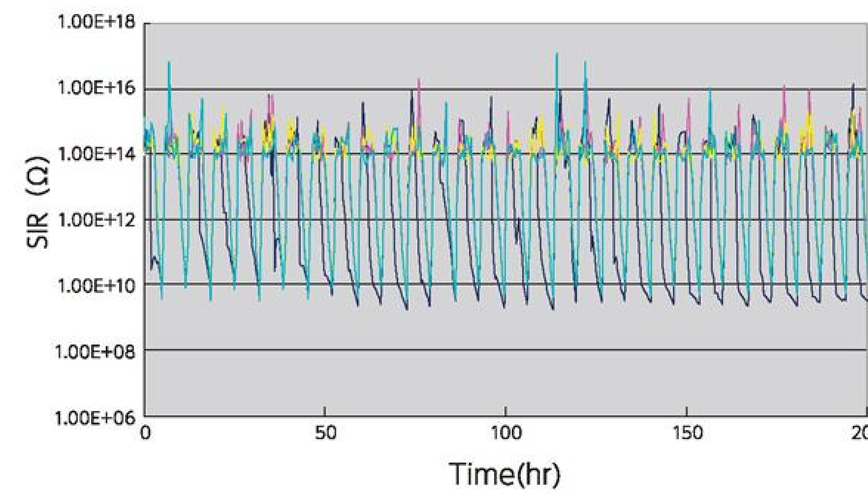
Prevents occurrence of migration under saturated conditions

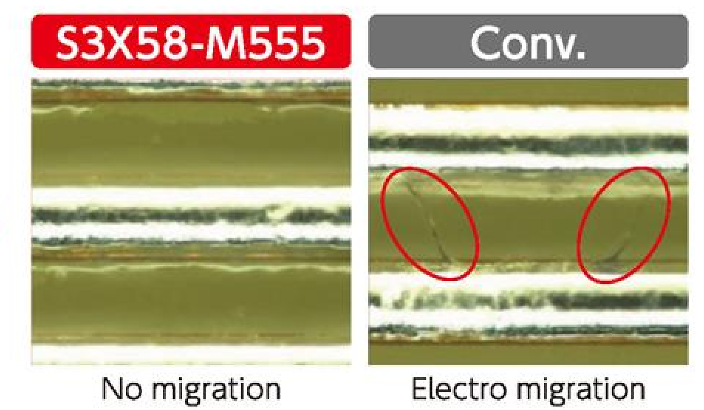
Automobiles are often exposed to drastic temperature & humidity changes, thus the PCBs used for those applications are also expected to be used in such environments. Those PCBs are required to maintain superior insulation resistance under dewed / badly saturated conditions.

[Dew cycling test]

●Test conditions
- Temperature:10°C⇔80°C
- Humidity:30%RH⇔95%RH
- No. of cycle:30 cycles

●Test board
- IPC-B-25(E-pattern)
- Pattern size width:0.318mm
- Pattern pitch:0.318mm

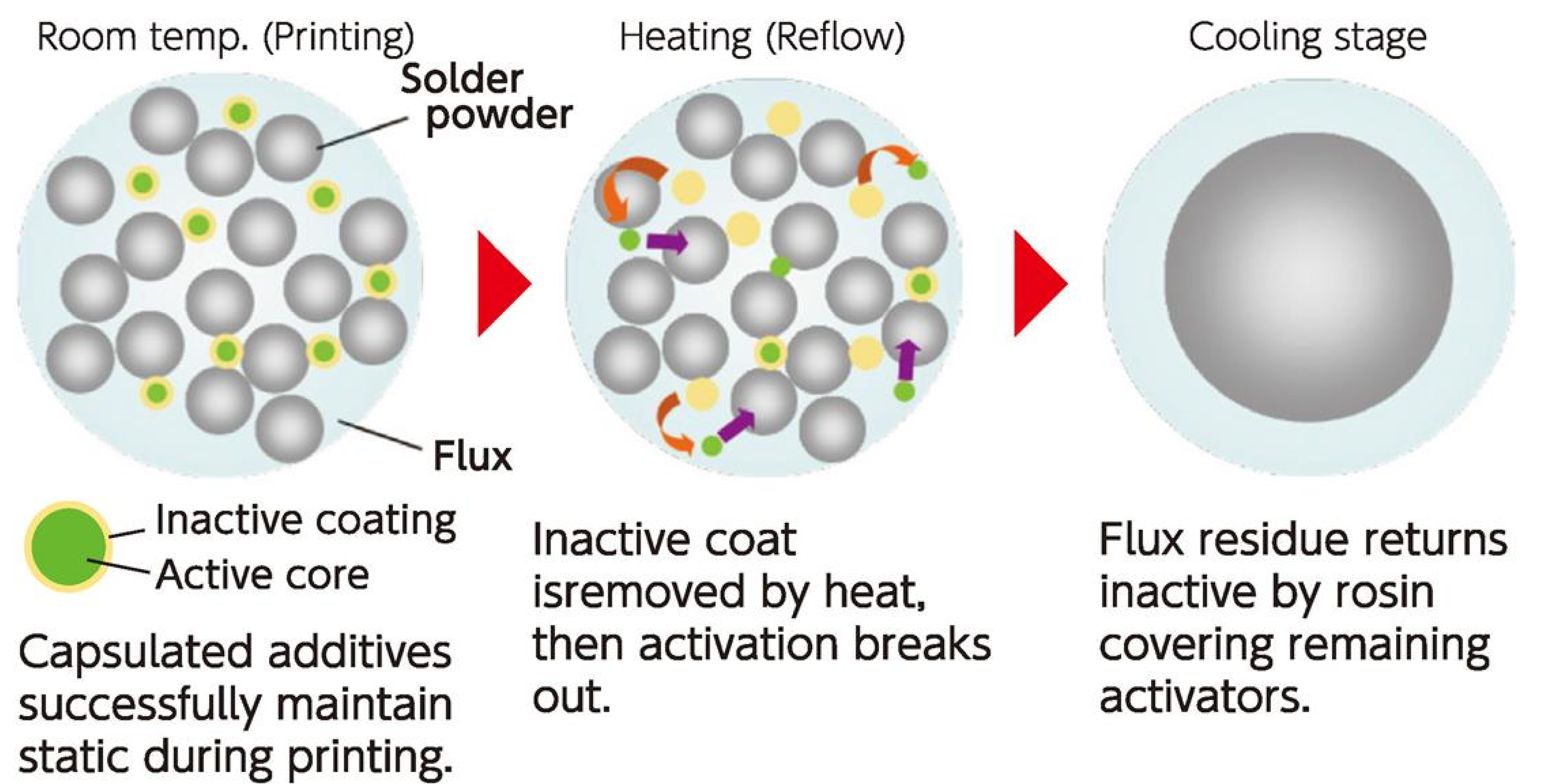




Newly adopted encapsulation technology

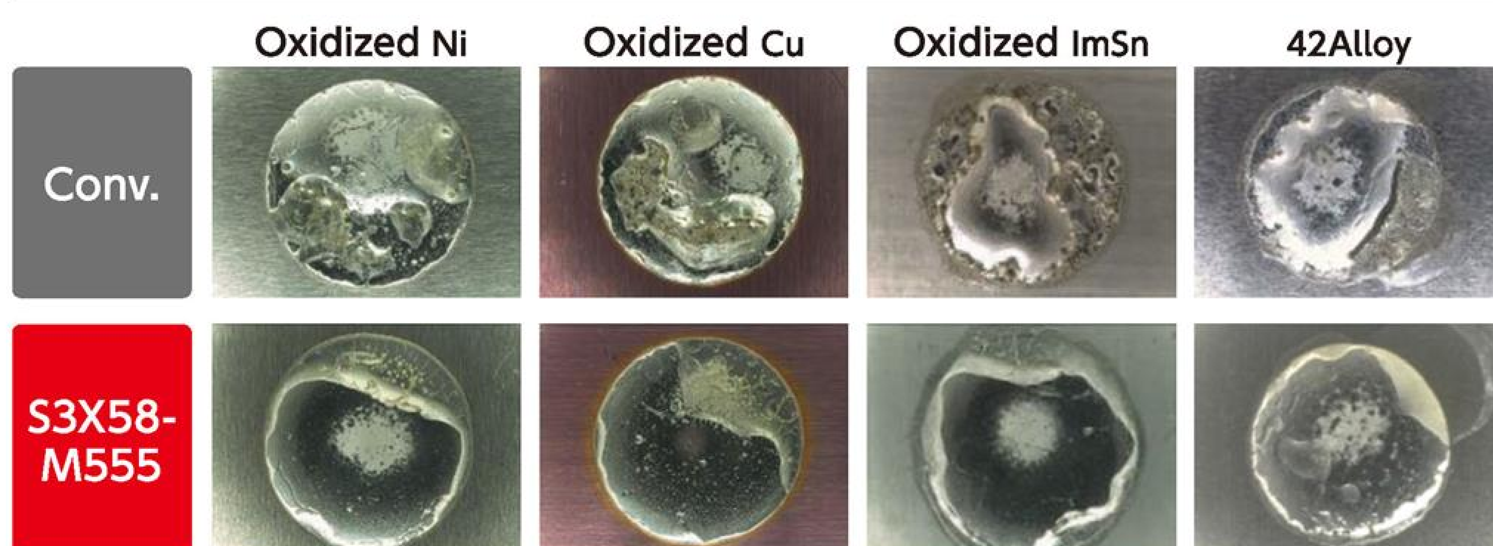
Adoption of additives with intense activation usually accelerates flux reaction with solder powder in a room temperature, resulting in viscosity increase making production quality inconsistent.
In S3X58-M555, the additives are encapsulated with and inactive coat, and contribute to the co-existence of viscosity stability and superior wetting.

Capsulation image



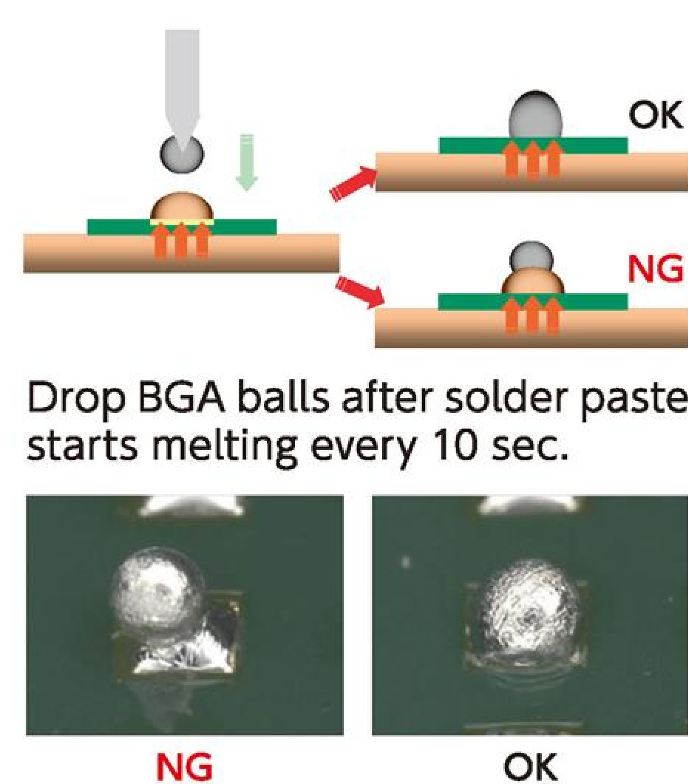
Perfect wetting with no de-wetting

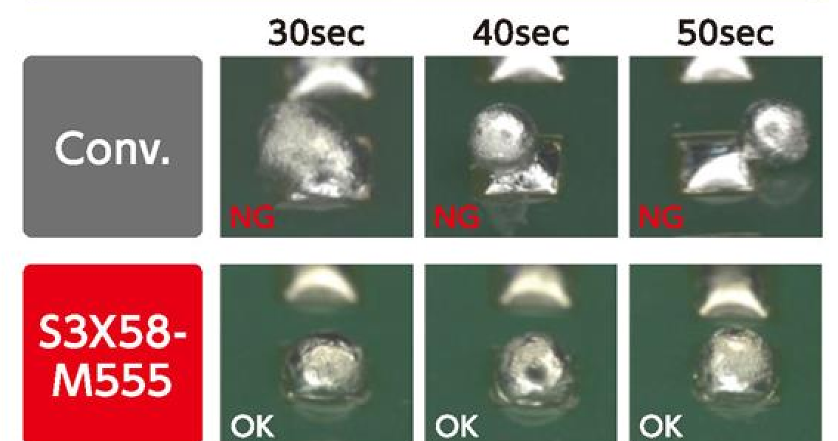
De-wetting test (heated at 150 °C for 16 hr.)



Prevents Head-in-Pillow at BGA

Ball drop test





The new flux effectively prevents Head-in-Pillow defects by improving heat resistance.

Product specifications

Product name	S3X58-M555
Alloy composition (%)	Sn 3.0Ag 0.5Cu
Melting point (℃)	217-219
Particle size (μm)	20-38
Viscosity (Pa・s)	220
Flux content (%)	12.0
Halide content (%)	0
Flux type	ROL0

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