

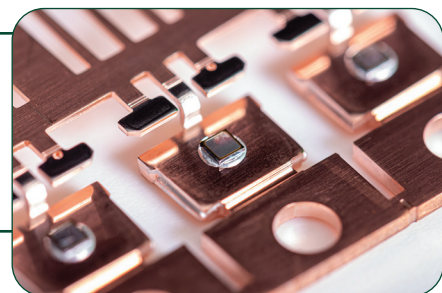
# PRODUCT DATA SHEET

# QuickSinter<sup>®</sup>

## InBake AgCu- Pressureless Ag Sinter Paste

### Introduction

**InBake AgCu-** is an Ag sinter paste formulated for use in power die-attach and clip-attach applications where a pressure sintering option may not be suitable or available, such as discrete power devices (high-Pb replacement), LED-attach, and WBG semiconductor die-attach in power modules. **InBake AgCu-** sinters well to Ag-coated and bare Cu surfaces.



### Features

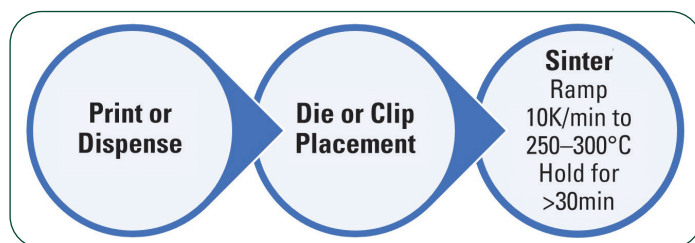
- Low process temperatures are possible (200–300°C)
- Pressureless or pressure-assisted sinter process
- Able to be sintered in a reflow oven or a box oven
- Can sinter to bare Cu finishes under inert gas
- High electrical and thermal conductivity
- Pb-free, RoHS compliant

### Typical Properties of Paste

Property	InBake AgCu-
Viscosity (Cone & Plate, 25°C, 5rpm)	18 Pas
Thixotropic Index (1rpm/10rpm)	8.25
Metal Load	91%
Density	6.0g/cm <sup>3</sup>

### Sinter Process Guidelines

- Actual process parameters can vary based on die size or surface finish
- The use of fixtures to add a low pressure assistance to the sintering can enhance joint strength
- Alternative process with pre-dry can be utilized for larger die attach



### Packaging

Ag sintering paste is available in syringes, jars, or cartridges.

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices. All Indium Corporation's products and solutions are designed to be commercially available unless specifically stated otherwise.

All of Indium Corporation's solder paste and preform manufacturing facilities are IATF 16949:2016 certified. Indium Corporation is an ISO 9001:2015 registered company.

## From One Engineer To Another<sup>®</sup>

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### Properties Post-Sinter

Property	InBake AgCu-
Melting Point (°C)	961
Electrical Resistivity (μΩ.cm)	5
Thermal Conductivity (W/mK)	210
CTE (ppm/K)	19

### Ionic Content

- Cl<sup>-</sup> : ≤1ppm
- Br<sup>-</sup> : ≤1ppm
- NO<sub>3</sub><sup>-</sup> : ≤1ppm
- SO<sub>4</sub><sup>2-</sup> : ≤1ppm
- Na<sup>+</sup> : ≤1ppm
- K<sup>+</sup> : ≤1ppm

### Storage and Handling Procedure

Refrigerated storage will prolong the shelf life of Ag sintering paste. The shelf life of the paste is 6 months when store at <10°C.

Ag sintering paste packaged in cartridges should be stored tip down. Ag sintering paste should be allowed to reach ambient working temperature prior to use. After removing from cold storage, paste should be allowed to stand for at least 4 hours at room temperature before using. Actual time to reach thermal equilibrium will vary with container size. Paste temperature should be verified before use. Jars and cartridges should be labelled with date and time of opening.

### Technical Support

Indium Corporation sets the industry standard in providing rapid response, onsite technical support for our customers worldwide. Thoroughly knowledgeable in all facets of Materials Science as it applies to the electronics and semiconductor sectors, Technical Support Engineers provide expert advice on Ag sintering applications.

### Safety Data Sheets

Please refer to the SDS document within the product shipment, or contact our local team to receive a copy.



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