Ball-Attach Flux

- For BGA, WLCSP, and FOW/PLP
- Flux rheology applicable for all sphere sizes
- Suitable for Pb-free applications
- Uniform pin transfer/printing over extended periods
- Low voiding
- No "missing ball"
- Excellent solderability on a wide range of surfaces
- Cleanable with DI water only

Major Users

- Mobile Application Processor
- Memory
- WLCSP, FOWLP

Contact our engineers: **askus@indium.com**
Learn more: **www.indium.com/ball-attach**

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.

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Ball-Attach Flux

WS-446-AL	Pin Transfer	Best flux for poor solderability, halogen-containing
WS-446HF		Eliminates the prefluxing step for OSP
WS-823		Best all-around halogen-free ball-attach flux, easily cleaned
WS-676	Printing	Suitable for WLCSP
WS-759		Controlled wetting, suitable for FOW/PLP
WS-829		Best for small spheres and/or high-density ball-attach

- Consistent viscosity and tack ensure consistent flux deposit sizes and minimal process variation
- Eliminates the need for a prefluxing step, which:
  - Decreases process costs
  - Minimizes package warpage
  - Improves units per hour (UPH)
- High viscosity and rapid soldering eliminates missing ball during reflow
- Cleanable with room temperature DI water only, eliminating chemical cleaning costs and costs of heating water

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