Henkel Solutions for Leadframe Packaging
Die Attach Pastes

DIE ATTACH PASTES (DAP) FOR WIREBOND LEADFRAME PACKAGING

- Discrete and DIP
  - Electrically Conductive
    - LOCTITE ABLESTIK 8200TI
    - LOCTITE ABLESTIK 8352L
    - LOCTITE ABLESTIK 84-1LMISR4
    - LOCTITE ABLESTIK 8600
    - LOCTITE ABLESTIK ABP 8060T
    - LOCTITE ABLESTIK ABP 8065T
    - LOCTITE ABLESTIK ABP 8066T
    - LOCTITE ABLESTIK QMI529HT-LV
    - LOCTITE ABLESTIK SSP 2020
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 8900NCM
    - LOCTITE ABLESTIK ABP 8910T
- QFN
  - Electrically Conductive
    - LOCTITE ABLESTIK 3230
    - LOCTITE ABLESTIK 3290P
    - LOCTITE ABLESTIK 8200TI
    - LOCTITE ABLESTIK 8290
    - LOCTITE ABLESTIK 8302
    - LOCTITE ABLESTIK 8390
    - LOCTITE ABLESTIK FS 849-TI
    - LOCTITE ABLESTIK QMI519
    - LOCTITE ABLESTIK SSP 2020
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 2025D
    - LOCTITE ABLESTIK QMI536NB
- QFP
  - Electrically Conductive
    - LOCTITE ABLESTIK 3230
    - LOCTITE ABLESTIK 3290P
    - LOCTITE ABLESTIK 8200TI
    - LOCTITE ABLESTIK 8290
    - LOCTITE ABLESTIK 8302
    - LOCTITE ABLESTIK 8390
    - LOCTITE ABLESTIK ABP 8064T
    - LOCTITE ABLESTIK FS 849-TI
    - LOCTITE ABLESTIK QMI529HT-LV
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 2025D
    - LOCTITE ABLESTIK ABP 8611
- SOIC, TSOP and TSSOP
  - Electrically Conductive
    - LOCTITE ABLESTIK 8200TI
    - LOCTITE ABLESTIK 8290
    - LOCTITE ABLESTIK 8302
    - LOCTITE ABLESTIK ABP 8064T
    - LOCTITE ABLESTIK ABP 8065T
    - LOCTITE ABLESTIK ABP 8066T
    - LOCTITE ABLESTIK FS 849-TI
    - LOCTITE ABLESTIK QMI529HT-LV
    - LOCTITE ABLESTIK SSP 2020
  - Electrically Non-conductive
    - LOCTITE ABLESTIK 2025D
    - LOCTITE ABLESTIK 8900NCM
    - LOCTITE ABLESTIK ABP 8611
    - LOCTITE ABLESTIK QMI536NB

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LOCTITE®

Die Attach Pastes

ELECTRICALLY CONDUCTIVE DIE ATTACH PASTES (DAP)

PRODUCT	DESCRIPTION	KEY ATTRIBUTES	DIE SIZE (mm)	SUBSTRATE FINISH	MOISTURE SENSITIVITY LEVEL, MSL	VOLUME RESISTIVITY (Ohm·cm)	THERMAL CONDUCTIVITY (W/m·K)	RECOMMENDED CURE
LOCTITE ABLESTIK 3230	Ag-filled, epoxy die attach adhesive	• Low stress • Excellent adhesion to Cu • Oven cure	≤ 8 x 8	Cu or Ag	L3 260°C capable	5.0×10^{-2}	0.6	30 min. ramp and 15 min. hold at 175°C
LOCTITE ABLESTIK 3290P	Ag-filled, epoxy die attach adhesive	• Medium modulus • Low outgassing • High reliability • Snap or oven cure	≤ 5 x 5	Cu, Ag or PPF	L2 260°C capable	2.0×10^{-2}	0.8	180 sec. to peak 240°C (snap)
LOCTITE ABLESTIK 8200TI	Ag-filled die attach adhesive	• No bleed • Excellent adhesion to pre-plated finishes (PPF) • Oven or snap cure	≤ 5 x 5	Cu, Ag, PPF or Au	L1 260°C capable	5.0×10^{-5}	3.5	180 sec. to peak 220°C (snap)
LOCTITE ABLESTIK 8290	Ag-filled, epoxy die attach adhesive	• Low stress • Low bleed • Excellent adhesion to Cu • Oven cure	≤ 5 x 5	Cu, Ag, PPF or Au	L3 260°C capable	8.0×10^{-3}	1.6	30 min. ramp and 15 min. hold at 175°C
LOCTITE ABLESTIK 8302	Ag-filled die attach adhesive	• Low stress • Excellent hot/wet adhesion • Excellent peel strength • Low moisture absorption • Oven cure	≤ 8 x 8	Cu, Ag or PPF	L1 260°C capable	1.0×10^{-4}	0.8	30 min. ramp and 60 min. hold at 175°C
LOCTITE ABLESTIK 8352L	Ag-filled die attach adhesive	• Low stress • Minimal voiding • Good bleed performance • Good adhesion to multiple metal surfaces • Oven or snap cure	≤ 8 x 8	Cu, Ag, PPF or Au	L2 260°C capable	5.0×10^{-5}	5.5	120 sec. to peak 220°C (snap)
LOCTITE ABLESTIK 8390	Ag-filled, epoxy die attach adhesive	• Low stress • Low condensable volatiles • Moderately stress absorbing • Excellent dispensability • In-line oven snap cure or oven cure	≤ 5 x 5	Pd or Ag	L3 260°C capable	8.0×10^{-4}	1.8	80 sec. to peak 220°C (snap)
LOCTITE ABLESTIK 84-1LMISR4	Ag-filled, epoxy die attach adhesive	• Excellent dispense capability • Long work life • High throughput • Box oven cure	≤ 3 x 3	Ag, PPF or Au	L1 260°C capable	$\geq 2.0 \times 10^{-4}$	2.5	1 hr. at 175°C
LOCTITE ABLESTIK 8600	Ag-filled, acrylate die attach adhesive	• Low bleed • Excellent in-package thermal performance • Oven or snap cure	≤ 5 x 5	Cu, Ag, PPF or Au	L1 260°C capable	1.0×10^{-3}	> 4	60 sec. to peak 220°C (snap)

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Henkel

LOCTITE®

Die Attach Pastes

ELECTRICALLY CONDUCTIVE DIE ATTACH PASTES (DAP) (CONTINUED)

PRODUCT	DESCRIPTION	KEY ATTRIBUTES	DIE SIZE (mm)	SUBSTRATE FINISH	MOISTURE SENSITIVITY LEVEL, MSL	VOLUME RESISTIVITY (Ohm·cm)	THERMAL CONDUCTIVITY (W/m·K)	RECOMMENDED CURE
LOCTITE ABLESTIK ABP 8060T	Ag-filled, BMI hybrid die attach adhesive	• High modulus • High die shear strength • Hydrophobic • Oven cure	≤ 2 x 2	Cu, Ag, PPF or Au	L2 260°C capable	2.5 x 10^{-5}	20	45 min. ramp and 60 min. hold at 200°C
LOCTITE ABLESTIK ABP 8064T	Ag-filled die attach adhesive	• Medium modulus • Low outgassing • Oven cure	3 x 3 – 8 x 8	Cu, Ag, PPF or Au	L1 260°C capable	2.0 x 10^{-5}	22	60 min. ramp and 60 min. hold at 180°C
LOCTITE ABLESTIK ABP 8065T	Ag-filled, epoxy hybrid die attach adhesive	• No channel void issue • High die shear strength • Dispensable silver paste • Oven or snap cure	≤ 2 x 2	Ag or Au	L3 260°C capable	3.0 x 10^{-5}	10	30 min. ramp and 60 min. hold at 185°C in nitrogen (oven)
LOCTITE ABLESTIK ABP 8066T	Ag-filled die attach adhesive	• Long open time • High die shear strength • Hydrophobic • Low outgassing • Oven cure	≤ 5 x 5	Cu, Ag, PPF or Au	L1 260°C capable	4.0 x 10^{-5}	15	30 min. ramp and 60 min. hold at 175°C
LOCTITE ABLESTIK FS 849-TI	Ag-filled die attach adhesive	• Excellent in-package thermal performance • Low bleed • Medium modulus • Low outgassing • Oven cure	≤ 8 x 8	Ag or Au	L2 260°C capable	2.0 x 10^{-5}	7.8	15 min. ramp and 30 min. hold at 175°C
LOCTITE ABLESTIK QMI519	Ag-filled, BMI/ acrylate die attach adhesive	• Excellent dispense capability • Long work life • High throughput • Hydrophobic • Fast oven cure or *Skip*Cure	≤ 5 x 5	Cu, Ag, PPF or Au	L1 260°C capable	1.0 x 10^{-4}	3.8	≥ 10 sec. at 200°C (*Skip*Cure)
LOCTITE ABLESTIK QMI529HT-LV	Ag-filled, BMI hybrid die attach adhesive	• Good dispensing characteristics • Stable at high temperatures • Hydrophobic • Excellent adhesive strength • Oven cure	≤ 8 x 8	Ag or PPF	L2 260°C capable	5.0 x 10^{-5}	8	30 min. ramp and 60 min. hold at 175°C
LOCTITE ABLESTIK SSP 2020	Ag sintering die attach adhesive	• High die shear strength • Robust dispense and stencil print performance • Good workability • High-temperature sinter with or without pressure	≤ 3 x 3	Ag or Au	L3 260°C capable	4.8 x 10^{-5}	> 100	10 min. ramp and 60 min. hold at 250°C (pressureless sintering)

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Die Attach Pastes

ELECTRICALLY NON-CONDUCTIVE DIE ATTACH PASTES (DAP)

PRODUCT	DESCRIPTION	KEY ATTRIBUTES	DIE SIZE (mm)	SUBSTRATE FINISH	MOISTURE SENSITIVITY LEVEL, MSL	MODULUS AT 25°C (MPa)	THERMAL CONDUCTIVITY (W/m·K)	RECOMMENDED CURE
LOCTITE ABLESTIK 2025D	Silica-filled die attach adhesive	• Low bleed • Very low stress • Red color for vision recognition • Oven cure	≤ 8 x 8	Cu, Ag or Au	L3 260°C capable	407	0.4	30 min. ramp and 15 min. hold at 175°C
LOCTITE ABLESTIK 8900NCM	PTFE-filled, epoxy die attach adhesive	• Low bleed • Low voiding • Moderately stress absorbing • Excellent dispense capability • Contains no category 3 carcinogenic, mutagenic, or reprotoxic (CMR) substances • Oven cure	≤ 8 x 8	Pd, Cu, Ag or PPF	L3 260°C capable	680	0.3	30 min. ramp and 15 min. hold at 175°C
LOCTITE ABLESTIK ABP 8611	BMI hybrid die attach adhesive	• Excellent dielectric properties • Suitable for Cu wire or Au wire bonding • High modulus at high temperatures • Oven cure	≤ 2 x 2	Cu, Ag or PPF	L3 260°C capable	5,000	0.7	30 min. ramp and 60 min. hold at 175°C
LOCTITE ABLESTIK ABP 8910T	Alumina-filled, BMI hybrid die attach adhesive	• Medium modulus • High reliability • Oven cure	≤ 8 x 8	Cu, Ag or PPF	L3 260°C capable	8,870	1.3	30 min. ramp and 15 min. hold at 175°C
LOCTITE ABLESTIK QMI536NB	PTFE-filled, BMI die attach adhesive	• Low bleed • Very low stress • White color for vision recognition • Widely used for stacked die • Fast oven cure	≤ 8 x 8	Cu, Ag or PPF	L3 260°C capable	300	0.3	30 min. at 150°C

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