

IMT-EE1040 CONDUCTIVE DIE ATTACH ADHESIVE

IMT-EE1040 is a single component, silver filled die attach adhesive. This product is designed to meet demanding semiconductor and microelectronics applications. It has an excellent adhesion property to various leadframes, high Tg FR4, BT based substrates and flex-tape. This conductive die attach adhesive is developed for fast cure at low temperature and/or snap cure at moderate temperature.

This high performance conductive die attach adhesive is packaged in syringes for use in automated, high speed dispensing equipment or in jar for stamping / pin transfer method.

IMT-EE1040 does not contain solvent and is a 100% solid system. It complies to RoHS3, EU directive 2015/863, Substances of Very High Concern (SVHC) published by ECHA as well as Halogen Free.

TYPICAL PROPERTIES*

Cure Conditions [Actual holding temperature & time]	150°C for 1 to 2mins (Snap Cure) 140°C for 15mins (Fast Cure) 130°C for 30mins (Fast Cure)
Pot Life	≥ 48 hours at room temperature
Shelf Life	12 months at -20°C or below
Thaw Time from -20°C to RT	3cc syringe: 20mins 5cc & 10cc syringes: 40mins
<u>Physical Properties</u>	
Color	Silver before & after cure
Consistency	Smooth, medium viscosity paste
Specific Gravity	3.00
Viscosity @20rpm, 25°C	6,500cPs
Thixotropic Index (1/10rpm)	3.60
Glass Transition Temperature, Tg	> 160°C
Modulus @25°C	3,100MPa
CTE α_1 (below Tg)	58.57ppm
CTE α_2 (above Tg)	105.63ppm
Shore D Hardness	75
Die Shear Strength	≥ 10Kgf per 3.2 x 2mm chip on FR4 substrate
Weight Loss @200°C	0.144%wt
Weight Loss @300°C	0.694%wt
Weight Gain @100°C water, 1h	< 0.1%wt
<u>Electrical & Thermal Properties</u>	
Volume Resistivity	≤ 0.0010Ωcm
Thermal conductivity	2.0W/mK
<u>Ionic Contents</u>	
Chloride, Cl ⁻	< 20ppm
Sodium, Na ⁺	< 5ppm
Potassium, K ⁺	< 5ppm

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* The information is based on data and tests believed to be accurate. In-Mat Technologies (S) Pte Ltd makes no warranties as to its accuracy and assumes no liability in connection with the use or inability to use this product.