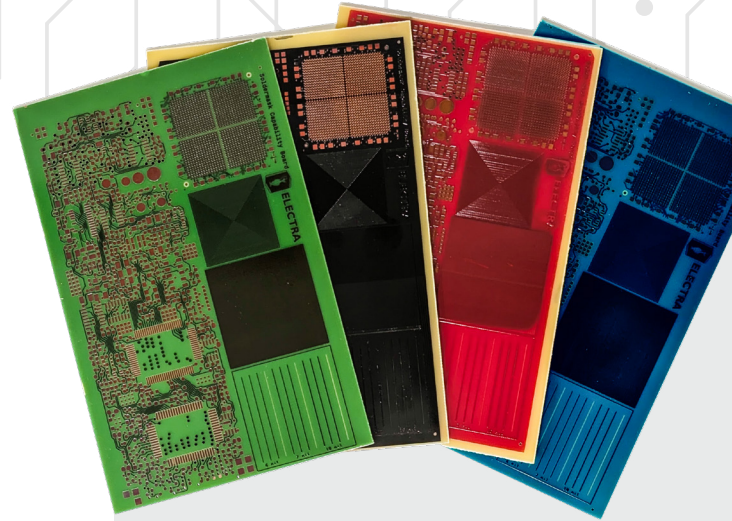




**ELECTRA**



# ElectraJet® EMJI 10 Inkjet Soldermask

## PCB Manufacturing with Proven Performance

ElectraJet® EMJI 10 is the market-leading inkjet soldermask, delivering unmatched quality, robustness and reliability. Designed for modern PCB production, EMJI 10 provides a streamlined, sustainable, and cost-effective solution for high-performance applications.

Available in Four Vibrant Colours:

- Green
- Blue
- Black
- Red



We Also Offer Flexible Soldermask:

- Green
- Amber



## Key Features/Highlights

### High Performance

- EMJI 10 designed to meet all key performance criteria
  - IPC SM840, UL-94V-0, no SVHCs, thermal cycling and heat storage

### Robust Formulation

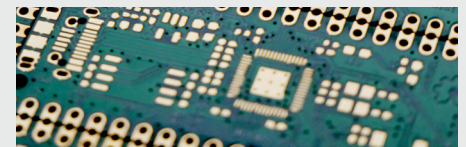
- Ink stable under a range of temperatures and environmental conditions
- No change in ink viscosity or particle size during use or shelf life of product
- Ink robustness critical for ensuring consistent printing with minimal problems
- Approved for use on leading inkjet printheads:
  - Konica Minolta – KM1024iMHE
  - Konica Minolta – KM1024iSHE
  - Konica Minolta – KM1800i
  - FUJIFILM Dimatix – Samba®

### Reliability

- Waveform designed to reduce print quality defects
- Formulated to ensure high reliability jetting
- Minimal tool downtime during operation

## Why Choose ElectraJet® EMJI 10?

- **Proven Production Formulation** – Commercialised since 2019, extensively validated in real-world manufacturing.
- **Market Leader** – Electra is the global leader in inkjet soldermask, trusted by top PCB manufacturers worldwide.
- **Largest supplier** – Largest supplier of inkjet soldermask globally.
- **High-Performance & Reliable** – Meets strict automotive specifications, including high-temperature storage and thermal cycling.
- **Culmination of over 10 years of Innovation** – Developed through a decade of dedicated R&D in inkjet soldermask technology.
- **Eco-Friendly Solution** – Supports sustainable PCB manufacturing with reduced waste and material efficiency.



## Join the Future of Soldermask Technology

Experience the benefits of ElectraJet® EMJI 10 and take your PCB manufacturing to the next level.

Contact us today to learn more!

# ElectraJet® EMJI 10 Inkjet Soldermask Performance

## Industry Standards/Qualifications

Standard	Requirement	Result
IPC SM-840 E	CLASST & H	Pass
UL94	V-0	Pass

## Additional Final Properties

Test	Requirement	Result
Lead-Free Solder Resistance	3 x 10s at 288°C – tape test	Pass
Multiple Assembly Reflow	6 reflow cycles (peak 260°C) – no cracking	Pass
Solvent Resistance	30 seconds methylene chloride	Pass
ENIG Plating Resistance	Ni 5-10 microns, Au <0.1 microns – tape test	Pass
Acid Resistance	10% HCl, 30 min dip at 20°C – tape test	Pass
Alkali Resistance	10% NaOH, 30 min dip at 20°C – tape test	Pass
Adhesion To Gold	Cross-hatch & tape test ≥4B (ASTM) ≥GTI (ISO)	Pass
Thermal Storage DIN IEC 60068-2-2	TC7 1000h at 150°C	Pass
Thermal Shock Bosch TC7	-40°C, 150°C, 1000 cycles	Pass (formulation dependent)
Thermal Shock Bosch TC4.2	-40°C, 125°C, 1000 cycles	Pass
Thermal Shock IPC-TM-650 Method 2.6.7.3	-65°C, 125°C, 100 cycles	Pass
Dielectric Constant	Measured at 10GHz, 22°C	2.99-3.50 (formulation dependent)
Dissipation Factor	Measured at 10GHz, 22°C	0.0228
Heat/Humidity	1000 hours 85°C/85%RH	Pass
Pressure Cooker (PCT)	100 min at 121°C (2 atm) – tape test	Pass
Flexibility Test Polyimide Substrate	180° crease – tape test (formulation specific)	Pass (formulation dependent)

## Soldermask Outgassing

Test	ASTM E595 Requirement	Result
Total Mass Loss (TML)	Max 1.0%	0.70%
Collected Volatile Condensable Material (CVCM)	Max 0.10%	<0.01%
Recovered Mass Loss (RML) TML-WVR	Report	0.49%
Water Vapour Recovered (WVR)	Report	0.21%