

LOCTITE® ECI 1213 E&C

October 2023

Product description

LOCTITE® ECI 1213 E&C provides the following product characteristics:

Technology	Solvent based ink
Appearance	Grey liquid
Filler type	Silver
Product benefits	<ul style="list-style-type: none"> Highly conductive Excellent adhesion Suitable for pad printing Low temperature curing capability
Drying	Heat dry
Application	Inks and coatings, Electrically conductive ink
Typical application	Pad printable circuit
Key substrates	PA+Fiber, PC+Fiber, PC, LPA, PBT, PPS, Ceramic, Anodized Aluminium

LOCTITE® ECI 1213 E&C is specially formulated for use in pad printing applications of highly conductive antenna structures.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25°C, mPa.s (cP)

Shear rate 10s⁻¹ 3,000

TYPICAL CURING PERFORMANCE

Recommended drying cycle

120 minutes @ 90-95°C

LOCTITE® ECI 1213 E&C can be dried using forced air or infrared systems. Higher temperatures for longer time exposure will improve the performance. Care should be taken with infrared. Too much energy can destroy the coating. Design drying rates for the maximum the substrate and production speeds can tolerate.

The above drying profile is a guideline recommendation. Conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer drying equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Solids @200°C, % 80±2

Electrical properties

Electrical conductivity after 120 min @ 90°C, Ohm-cm <2x10⁻⁵

Adhesion properties

Adhesion on PA substrate, cross hatch, grade 5B

GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

Directions for use

1. Surface preparation

- Keep surface clean before use to avoid possible contamination.

2. Mixing/Dilution

- Stir to ensure homogeneity before use.
- Avoid rapid stirring as this causes air entrapment.

3. Clean up

- Uncured ink can be cleaned with ethanol.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: -20°C. Storage below -20°C or above -20°C can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Henkel representative.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 µm / 25.4 = mil
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

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Reference 1