



Description

Perma CI inks are single component, thermally cured inks used for printing applications where solvent and abrasion resistance is required.

When printed and cured on molding compounds used for electronics encapsulation, Perma CI inks will pass the permanency requirements of MIL STD 883C, and MIL STD 202F.

Applications

* Thermoset Plastics

* Ceramics

* Metals

Note: Substrates must be able to tolerate the cure schedule for the ink.

Mixing Instructions

Perma CI inks are ready-to-use inks requiring little or no thinner addition before use. During the printing process, the following thinners can be used to decrease viscosity or slow solvent evaporation of ink:

Thinning Solvents

21B-200 quick reducer
XB-reducer

Fast
↓
Slow

Note: Perma RA series thinning solvents can also be used to control ink viscosity and solvent evaporation.

Drying and Curing

Perma CI inks dry to the touch quickly after printing, but do not develop ultimate physical properties until the inks are properly cured.

Curing times may vary due to part size and the type of curing equipment used. Common types of curing equipment include forced air ovens, IR lamps, and hot air torches.

Following is the recommended curing time for specific temperatures:

<u>Temperature</u>	<u>Cure Time</u>
130° C	60 - 70 minutes
140° C	45 - 50 minutes
150° C	30 - 35 minutes
160° C	20 - 25 minutes
170° C	15 - 20 minutes

Note: Exposure of the ink to temperatures greater than 170° Celsius for extended periods of time may cause yellowing.

Cleaning

~~Perma XB reducer or Perma RA-200 thinner is the recommended cleaning solution for all Perma CI inks. All equipment and utensils should be cleaned immediately after use.~~

Isopropyl rubbing alcohol (70%) can be used for minor cleanups on exterior surfaces.

Storage

~~Perma CI inks are recommended for use within six months from the date of receipt~~

Perma CI inks should be stored in an environment between 15° and 25° Celsius. When stored at cooler temperatures or for extended periods of time without use, separation in the ink may occur. If separation occurs, the sealed bottle can be agitated vigorously by hand for several minutes until a consistent mixture is achieved.

For Additional Information

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