

TECHSIL SILICONE INKS

TSI is a one-component, flowable, heat curing ink, which offers primerless adhesion to a wide variety of substrates. This product requires an elevated temperature cure and exhibits very low linear shrinkage.

Key Performance Properties:

- No Solvent
- One component product- no mixing required
- Fast Cure at elevated temperature
- Primerless adhesion to silicone rubber
- No cure by-products, low linear shrinkage
- Non-corrosive to metals and sensitive substrates
- Excellent dielectric properties
- Outstanding performance over a wide thermal range

Typical Product Data:

Colour:	Various
Viscosity:	110,000cps
Specific Gravity:	1.24
Hardness:	Shore A 45
Elongation:	200%
Tensile Strength psi:	425

How to Use:

Compatibility:

TSI Silicone Ink will cure in contact with most clean, dry, surfaces. However, certain materials, such as butyl and chlorinated rubber, sulphur-containing materials, amines and certain metal soap cured RTV silicone rubber compounds can cause cure inhibition. It is recommended that a patch test be performed to determine the compatibility between the TSI Silicone Ink & the substrate.

Bonding:

TSI Silicone Ink offers outstanding adhesion characteristics to a wide variety of different substrates without the need for a primer. For difficult to bond substrates, or where more aggressive chemical adhesion is desired, the adhesion may be enhanced by using SS4155 silicone primer. To apply the primer, thoroughly clean the surface and let dry. Then apply a uniform film (0.01-0.02mm/0.5-1.0mil) of SS4155 silicone primer and allow to air dry for at least one hour.

Curing:

TSI Silicone Ink requires the use of elevated temperatures to achieve full cure. Typical cure times and temperatures are as follows:

Standard Hot Air Gun (max power)	1-2 mins
(medium power)	3-4 mins
Oven Cure @ 180°C	5-6 mins

The actual cure times are effected by such things as cross sectional thickness of the heat ink capacity of the overall efficiency and type of oven used (i.e. convection, infrared). If an oven is used, it should be well ventilated.

Contact Details

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Storage and Shelf Life

Material supplied in original unopened containers under cool dry condition between 0°C and 10°C should have a shelf life of 12 months. Each batch of material will have an actual use by date allocated at the time of manufacture; this can be confirmed by the Techsil Sales Office. Once used, the containers must be kept sealed, to prevent effects from contaminants.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as to the suitability of such information for their particular use.

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