

Technical Bulletin | **Print-On Silicone Inks®**

Description

Print-On Silicone Inks® are designed for pad printing and screen printing on silicone parts and textiles. Spraying, brushing, dipping and other methods of application are possible by altering the viscosity of the ink.

Typical Applications

Silicone Wrist Bands	Silicone Electronic Covers
Silicone Watch Bands	Silk Screen
Silicone Tubing	Pad Printing
Silicone Keypads	Textile Ink
Silicone Swim Caps	Silicone Control Panel Buttons

Color Options

Clear	Rich Blue (Light)
Black	Blue (Medium)
White	Dark Blue
Green	Gray
Yellow	Gold
Red	Silver

Mixing

Print-On Silicone Ink® base is supplied with a matched quantity of Print-On Silicone Ink Catalyst. The mix ratio by weight is 1 Part Print-On Silicone Ink® Catalyst to 10 Parts Print-On Silicone Ink® Base. Shake or stir the Silicone Ink Base before mixing with the Catalyst. Combine proper amounts of Catalyst and Base in a clean mixing container; add the Catalyst to the Base to ensure complete dispersion. Mixing may be done by hand with a spatula or by machine. When machine mixing, avoid prolonged high speeds. Avoid stirring in an excessive amount of air.

Working/Open Time

After mixing, the ink will remain useful for approximately 24-hrs at room temperature. Placing the material in a closed container in a cool (below 50°F) environment will extend the mixed pot life.

Thinning

If the mixed viscosity is too thick for a specific application, Print-On Silicone Ink® Diluent/Thinner is available to custom alter the viscosity. It will not adversely affect the adhesion of the system. There is no set ratio when adding Diluent/Thinner – experiment to find the best ratio for your application. Add the Diluent/Thinner after the Catalyst and Base have been mixed thoroughly together.

Matte Finish

Matte Finish Powder can be added to mixed silicone ink to reduce the glossiness of the cured ink and create a matte finish.

Curing

To cure the ink, apply heat at 250°F (121°C) for ~5 minutes or at 290°F (143°C) for ~2 to 4 minutes.

Caution: Cure Inhibition

Contact with some materials will inhibit the drying of Print-On Silicone Ink®. These include: silicone RTV containing organo-tin catalysts, sulfur-containing compounds, amines, some urethanes, and organic acids. A small-scale compatibility test is always recommended.

Shelf Life

For best results, store products in unopened containers at room temperature (60-90°F/15-32°C). Use products within six months.

Clean Up

Technical Grade d-Limonene Cleaner/Solvent is a good cleaning solvent for Silicone Inks; however, it must be handled with extreme caution owing to its flammability and health hazards.

Safety

Before use, read product labels and Safety Data Sheets. Follow safety precautions and directions. **INGESTION:** Seek medical attention; Do NOT induce vomiting. **SKIN CONTACT:** Remove contaminated clothing immediately and dispose of safely. When in contact with the skin, clean with soap and water. **INHALATION:** No first aid should be needed. Remove to fresh air. **EYE CONTACT:** Immediately flush with COOL water for 15 minutes; Call a physician if irritation persists. **PROTECTION FOR FIRSTAIDERS:** A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

Disclaimer

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