

MEDICAL DEVICE ADHESIVE SOLUTIONS FOR TPE ASSEMBLIES

INTRODUCING LOCTITE® SI 5057™

The use of Thermoplastic Elastomers (TPEs), in particular TPE-S and TPE-O, are increasing in usage in medical devices due to their versatility in formula and performance, and moderate cost. These alternative TPE materials can present challenges in adhesion and bonding performance, often requiring pretreatment such as primer, plasma, etc.

New LOCTITE SI 5057 medical device light-cure adhesive provides—without surface pretreatment—enhanced adhesion and bonding performance to TPE-O, TPE-S, and other challenging elastomers. This new adhesive solution is designed to address the broad range of TPE materials ranging from semi-flexible to highly flexible, and are tested to Henkel's test protocols based on ISO 10993 biocompatibility standards.



Enhanced Adhesion

Enhanced adhesion to rigid, flexible, and highly flexible low-polarity elastomers



Low-Viscosity

Low-viscosity for narrow bond-lines and for pre- and post-application



Faster Processing

LED light-curing for fast processing with short cure times



Easy Detection

Fluorescence for detection of adhesive presence and flow control



Biocompatible

Tested to Henkel's test protocols based on ISO 10993 biocompatibility standards



Enhanced Safety

Formulated without known hazardous ingredients

LOCTITE® SI 5057™

Low-viscosity, UV/VIS, light-curing silicone adhesive. It offers the softness and elongation of a silicone, and provides good adhesion to low and very-low polarity flexible and highly flexible materials, like TPE-S, and TPE-O thermoplastic elastomers, silicones, or flexible PP.

- Silicone properties
- Highly flexible
- Enhanced adhesion to TPE-S, TPE-O, and other low-polarity elastomers and silicones

KEY PERFORMANCE PROPERTIES*

FEATURES	LOCTITE SI 5057
CHEMISTRY	UV/VIS LIGHT-CURE SILICONE
APPEARANCE	TRANSPARENT CLEAR
VISCOSITY 25°C, mPa·s (cP)	750 (NOMINAL)
SHORE HARDNESS	SHORE A 60
ELONGATION, AT BREAK	211

ORDERING INFORMATION

PRODUCT	SIZE	IDH
LOCTITE SI 5057	25 ML SYRINGE	2997612
	1 L BOTTLE	2997611



DISPENSING

LOCTITE SI 5057 can be applied with LOCTITE dispensing equipment designed for manual, semi-automated, and fully-automated operations.



CURING

LOCTITE SI 5057 can be cured with UV or Visible light. The newest LOCTITE LED-curing units are ideally suited for rapid curing of Henkel's light-curing adhesives.

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