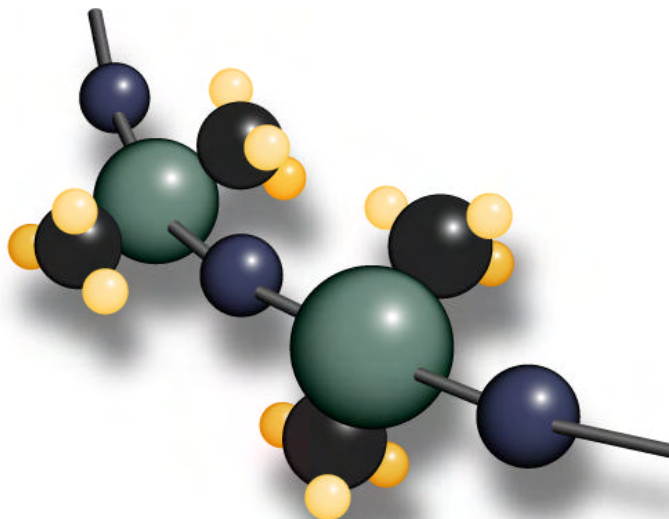


# Polymer Systems Technology Limited

UK & Ireland Distributor



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# Fast-Cure Silicone Adhesives for Medical Device Applications

NuSil's line of fast-cure silicone adhesives are two-part, platinum catalyzed, addition cure systems that provide excellent mechanical properties including high peel strength. The Unrestricted adhesives (MEDX-4213) may be considered for use in long-term implantable (>29 days) medical device applications, and the Restricted adhesives (MEDX-4013) may be used for short-term implant (<29 days) or external applications. These adhesives are typically used to bond silicones to metals, plastics, urethanes, ceramics, glass or other silicones – frequently without the use of primer.

While each product is designed to cure rapidly with the application of heat, either by a heat lamp, heat gun, or in an oven, some of the adhesives are uniquely designed to cure in less than 24 hours at room temperature (reference table below). Unlike other cure systems, formulations such as these do not require ambient moisture to cure. This cure system does not release alcohol byproducts or corrosive acids, which are often encountered with other silicone adhesive cure mechanisms. The workable consistency allows the products to be easily dispensed from an airless side-by-side kit, eliminating difficulties with mixing and de-airing.

MED3-4213 & MED3-4013 are the latest addition to the product line having a longer work time (minimum 60 minutes)

Product	Typical Work Time @ 25°C	*Cure Time @ 25°C	**Peel Strength lbf/in
<b>Unrestricted</b>			
MED1-4213	15 minutes	<24 hours	20
MED2-4213	24 hours	Heat Required	40
MED3-4213	2 hours	<24 hours	20
<b>Restricted</b>			
MED1-4013	15 minutes	<24 hours	20
MED2-4013	24 hours	Heat Required	40
MED3-4013	120 minutes	<24 hours	20

\*NuSil TM008

\*\*NuSil TM087 - Using Silicone Substrate



Each product is supported with extensive biocompatibility testing conforming to USP Class VI and select ISO-10993 testing requirements. Master Access Files (MAFs) for each of these products have been filed with the U.S. Food and Drug Administration. Customers interested in authorization to reference the MAFs must contact NuSil directly.

## Substrate Consideration

While these adhesives cure in contact with most materials common to biomedical assemblies, exceptions include sulfur cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and un-reacted residues of some curing agents. Some applications may require the use of primer.

## About NuSil Technology

NuSil Technology is a cutting edge manufacturer of silicone materials for the pharmaceutical, drug delivery, and medical device industry. NuSil develops custom materials designed to meet specific application needs, regardless of the quantity. ISO-9001 certified since 1994, NuSil operates state-of-the art laboratories and processing facilities in North America and provides global customer support.

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