

**MEDICAL DEVICE
ASSEMBLY SOLUTIONS**

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ABOUT CHEMENCE®

Since its founding in 1984 in the UK, Chemence® has continued to grow by identifying and innovating in niche specialty chemical segments. Up to this date our company is still privately owned by the Cooke family and many of the family members are actively involved in the daily operations.

Over the years we have grown organically and via acquisition and spread our reach over three continents. We have manufacturing sites in North America and Europe and sales offices in North America, Europe and Asia.

Chemence's adhesives and resins provide solutions to customers in a variety of markets. Our range of products can be found in use everywhere from operating rooms to living rooms, from automotive manufacturers to toy manufacturers, and anywhere in between.

Over the years we've gained valuable experience servicing many Global 500 organizations as well as small startups. Our key customers have included major automotive OEMs, market leading consumer electronics companies, some of the finest medical organizations around the world and have even sent rockets into space.

For more information about Chemence® and our products,
visit www.chemence.com.

IMPORTANT: It is the user's responsibility to test and determine the suitability of a product for the user's intended use. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets.



KRYLEX®

MEDICAL DEVICE ASSEMBLY ADHESIVES

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Chemence® has become a world leader in the medical device arena since its beginning in 1983. A global manufacturer of Class II and III tissue adhesives, we proudly bring you our latest innovation: KRYLEX® adhesives for medical device assembly.

STRONG RELATIONSHIPS BUILD QUALITY DEVICES

Chemence's focus is always on connecting our innovative product development with what matters to our customers' medical applications. Our strong technical knowhow and extensive application experience enable our customers to work with our technical teams to bring diverse new ideas to reality.

We encourage solid partnerships with industry leaders at all stages of device design from prototyping to manufacturing to ensure that together we can deliver the highest quality medical devices.



LEVERAGING EXPERIENCE THAT FEW HAVE

With over 25 years of experience in developing and manufacturing Class II and Class III medical devices ourselves, we know what Medical Device Manufacturers are looking for in a design partner. Our team is not only familiar with the rigorous standards that your medical devices need to meet, we always meet those standards ourselves when developing and manufacturing our topical skin adhesives for many of the largest medical centers around the globe as well.



FAST, STRONG, AND SOLVENT FREE

Also leveraging Chemence's strong history in developing Industrial adhesives, we've developed our products to provide fast, strong and reliable bonding. Our Cyanoacrylates and UV-curable adhesives cure almost instantly forming tack free bonds allowing our manufacturers to optimize their production throughput. Our adhesives stand up to the rigors of sterilization such as ETO and gamma as well as many other environmental aging tests such as temperature extremes, high humidity and submersion in various chemicals.



ISO 10993 BIOCOMPATIBLY FOR ADHESIVES

Most of our medical device assembly adhesives has passed ISO 10993 testing for cytotoxicity as a baseline. Depending on the application requiring an adhesive solution, many of our products also have passed ISO 10993 testing for skin sensitization and irritation as well. If you are looking for more subsections of ISO 10993 testing, we regularly work with our customers to develop custom products that could meet other subsection of the standard as well such as toxicity and hemocompatibility.



ISO 13485 CERTIFICATION MEANS QUALITY MANUFACTURING

At Chemence® we know medical manufacturers rely on their suppliers for consistent and reliable materials – we understand that adhesive failure in a medical device could mean the difference between life and death. Our Alpharetta, Georgia facilities are ISO 13485 and 9001 certified, ensuring that our products are made consistently and that they will conform to Medical Device Quality Management Standards. We're one of the few adhesive manufacturers in the world that can claim that robust quality certification.

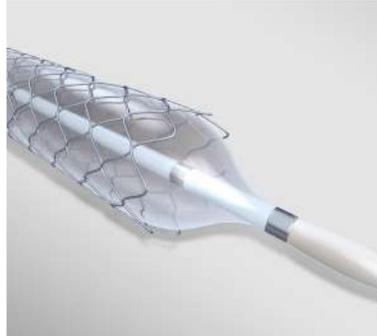
PRODUCTS

KRYLEX® adhesives can meet your performance requirements to deliver exceptional results. Our products have been used around the world for over three decades, enabling diverse new ideas, accelerating innovation and improving manufacturing efficiencies.



Micro Needle Bonding
KM9980-Series

Provide high pull strength on the smallest gauge needles. Fluorescing formulas available.



Catheter Assembly
KM9900-series

Adhesive solutions optimized for difficult to bond substrates.



Needle Bonding
KM9970-series

Ultra fast, tack-free cure. Reliable cure even with light colored hubs.



Tube Set Assembly
KM9900-series

Bonds rigid and soft substrates with a strong bond that flexes. LED cure optimized for improved processing efficiency.



Medical Electronics
Assembly
KH-series, KU-series

PUR hot melts and UV/dual-cure adhesives for assembly of electronics and wearable devices.



Opaque Substrate
Bonding
KM0100-series

UV and moisture curing cyanoacrylates for instant fixture and moisture cure in shadowed areas.

BETTER THAN FASTENERS & WELDING

Bolted assemblies, rivets and other mechanical fasteners require introducing holes into your medical device - causing points of weakness in the assembly. Heavy weight plastic assemblies can sometimes withstand the additional stress on the insertion site but when designing small or delicate products, mechanical fasteners are simply not an option. Ultrasonic welding is commonly used to assemble devices but the process can lead to high gap variances in the bond line and while solvent welding reduces this risk, the hazardous solvents come with a high risk of stress cracking delicate plastic substrates

Choosing KRYLEX® adhesives for assembling your medical devices is the more efficient, easier alternative to the above traditional fastening method.

ADVANTAGES OF ADHESIVES FOR MEDICAL DEVICES

- Adhesives easily fill and cure in irregularly shaped joints and assemblies providing a strong bond and robust seal in the bondline.
- Adhesives distribute stresses evenly across the bondline of the assembly ensuring a strong assembly.
- Adhesives are designed to bond to a wide variety of substrates including metals, glass, ceramics, and most plastics.
- Adhesives are normally colorless within the bondline, minimizing the aesthetic changes to the finished device.
- Light cure adhesives cure on demand and cyanoacrylates cure within seconds to ensure assembly processes are fast and efficient.

CUSTOMIZED FORMULATIONS

Chemence's dynamic mix of engineers and chemists from the industrial adhesive and medical device industries allows us to truly understand our customers' needs and work with you to develop the perfect product for your application. With hundreds of custom formulations already developed in our 30+ years of existence, chances are we already have a starting point ready for your customized requirements.

Our wide range of in-house analytical and mechanical testing equipment allows us to ensure a fast, thorough development process that will allow you to quickly go from design to validation to manufacturing. Generally, we can complete ISO 10993-5 testing for cytotoxicity in a few short weeks once a new formulation is locked in.

NOTES





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