



Permanent BioGaskets™ Products

CiDRA® Precision Services, LLC leverages the leak free seals produced by Permanent BioGasket™ technology to develop and manufacture custom fluidic products for the life sciences and medical device markets. Whether your application involves instruments, consumables, or research and development, CiDRA® Precision Services, LLC has the technology, know-how and experience to meet your needs.

Benefits

- Bonds to a Wealth of Glass, Ceramic and Crystalline Materials
- Direct Covalent Bond (No Adhesives)
- No Leaks After Repeated Use
- Amazing Variety of Geometric Features
- Reagent and Biomaterial Compatibility
- Rapid Prototypes



Applications

- Hybridization Chambers
- Microarray Gasket Slides
- Chambered Coverslips
- Flow Cells
- Life Sciences Instrumentation
- Medical Devices
- Fluidic Seals of All Types

BioGasket™ Technology

BioGaskets™ are custom silicone gaskets with proprietary surface activation that promotes leak free, covalent bonds with common life sciences and medical device materials. Un-activated surfaces maintain their native non-bonding properties. No adhesives are used, and virtually any BioGasket™ geometry can be produced to micron level tolerances. CiDRA® Precision Services, LLC machines glass, ceramic and crystalline material structures to add flow paths and mating geometries, and can add fluidic interconnects to provide customers with total solutions.

Advantages

- Seals Common Life Sciences and Medical Device Materials
- Optical Grade Glass Structures
- Complex Gasket Geometries
- Fluidic Fittings
- Holes, Grooves, Chamfers in Glass, Ceramic and Crystalline Material Structures
- Low Complexity Processes – Simple is Best!

Chemical Compatibility

- Acetone, Ethanol, Isopropyl Alcohol
- Hybridization Buffers
- Diluted KoH
- Diluted Bleach
- Human Blood & Blood Serum
- Synthetic Oligonucleotides
- DNA, Proteins & Antibodies
- Florescent Labels

Permanent BioGasket™ Specifications

Parameter	Specification
Gasket Thickness	25um to >700um
Gasket Thickness Tolerance	+/-5um (*)
Gasket Cut Width	50um to >1cm
Gasket Cut Dimensional Accuracy	+/-30um
Standard Gasket Colors	Clear, White, Red, Black
Gasket Stiffness	20 to 50 Shore A Durameter
Surface Roughness (Ra) for Optical Surfaces	<2nm
Scratch/Dig Within Clear Aperture for Optical Surfaces	10um/20um
Maximum Operational Temperature	200 °C
Fluidic Fittings	Luer, Barb, Nanoport™, Custom, Many Others

(*) +/-10um for gasket thickness > 75um

For more information about CiDRA® Precision Services, LLC and to discuss your application, contact Customer Services at (203) 774-4422.