

SPACE APPLICATIONS

ADHESIVES | SEALANTS | COATINGS



KOHESI BOND

Custom Engineered Adhesives

Kohesi Bond is a pioneer in manufacturing custom engineered adhesives, sealants, coatings, potting and encapsulation compounds. We offer a sweeping range of first-rate epoxy systems designed specifically for use in the assembly of aircraft interiors, components, structures, satellites and MRO applications.

Using our extensive technical expertise, we offer these formulations with an array of performance and curing characteristics. Our unique ability to tailor products to each application's specific needs, offers customers with reliable solutions and the ease of manufacturing. Product's mechanical strength, hardness, temperature resistance, viscosity, resistance to chemicals, heat dissipation, electrical conductivity and many other properties can be fitted through custom formulations. They can also be color matched precisely to the user's needs.

Through consistent quality, technical know-how and groundbreaking innovation, Kohesi Bond has proven to deliver complete solutions to today's growing aerospace industry.

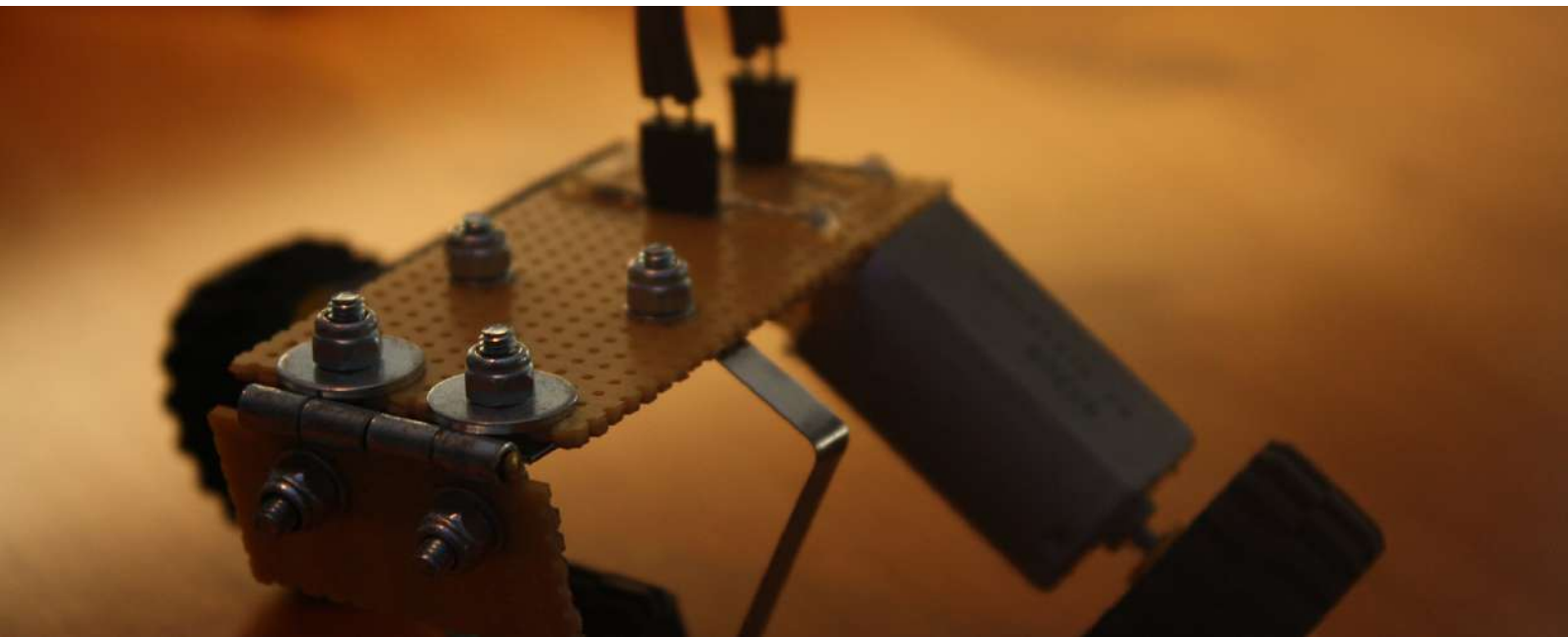


Innovation tailored to **your** needs

Kohesi Bond performance products are specially designed for successful use in your applications from initial prototyping to scaled-up production lines. Meeting new challenges of the aerospace industry means inventing new technology. To make this happen, we offer you round-the-clock assistance right from the research and design phase through the manufacturing process.

Typical Applications

- Optical Fiber Systems
- Fiber Reinforced Composite Assembly
- Braking Systems
- EMI/RFI Shielding
- Launch Canister Liners
- Potting & Encapsulation
- Microelectronic Applications
- Cryogenic Systems
- Ultra High Vacuum Assembly
- Flight Control Seals



Reach for the stars with our **space adhesives**

Kohesi Bond's space-ready compounds are capable of passing NASA standards for low outgassing (ASTM E-595). One of the key concerns while selecting an adhesive for space applications is its serviceability in extremely high vacuum environment. Systems operate under very high vacuum ($\sim 10^{-8}$ torr) in space. Any outgassing from the adhesive could lead to failure of crucial components of the system.

To avoid such failure during operation, NASA developed the ASTM E-595 low outgassing test standard. This test involves collecting volatiles from the test specimen and weighing the condensate to determine the following:

CVCM: The amount of collected volatile condensable materials (CVCM) on the collector plate.

TML: The amount of total mass loss (TML) by the sample

WVR: The amount of water vapor regained (WVR) by the sample

The material is said to pass or fail the test based on the following conditions:

CVCM $< 0.1\%$ and TML $< 1\%$ - **Pass**

CVCM $< 0.1\%$ and TML $> 1\%$ - **Pass if TML - WVR $< 1\%$**

CVCM $> 0.1\%$ or TML - WVR $> 1\%$ - **Fail**

In addition to low outgassing, epoxies need to withstand extreme temperature conditions in space; particularly at cryogenic temperatures. Kohesi Bond has specially formulated adhesives, sealants, coatings, potting and encapsulation compounds that are capable of passing all stringent prerequisites of the aerospace industry. Manufacturers of various space components, satellites, airplanes, unmanned air vehicles (UAV's) and sensors have successfully employed Kohesi Bond to meet their challenging requirements. Our technical experts will help you find the best suited product for your aerospace application.

LIST OF PRODUCTS

Product	Electrically Conductive	Electrically Insulative	Thermally Conductive	Bonding/ Sealing	Coating	Potting/ Encapsulation	Page No.
ONE COMPONENT EPOXIES							
KB 1427 HT		√		√		√	1
TUF 1613 HT-DA		√	√	√			1
TUF 1613 HT-CM		√	√		√	√	1
TUF 1820 ANHT		√	√	√			2
TUF 1820 HTS	√		√	√			2
TUF 1828 TC		√	√	√			2
TUF 1820 AOHT		√	√	√			3
TWO COMPONENT EPOXIES							
KB 1631 AOLV-1		√	√	√	√		4
KB 1631 HTC-1		√	√	√			4
KB 1631 FR-2		√				√	4
KB 1031 AT-2LO		√	√	√		√	5
KB 1031 ATHT-LO		√		√			5
KB 1031 AT-S	√		√	√			5
KB 1040-2		√		√	√	√	6
KB 1040 CTE-LO		√	√	√	√	√	6
KB 10473 FLAO		√	√	√	√	√	6
KB 1039 CRLP		√		√	√	√	7
KB 1039 CRLP-AO		√	√	√	√	√	7
KB 1452 HT-2		√		√	√	√	7
KB 1372-LO		√		√	√		8
KB 1600 FR-V		√		√	√	√	8
TUF 1621 AOHT		√	√	√	√		8
SODIUM SILICATES							
KB-SS-SIL	√				√		9
KB-SS-SCN	√				√		9