

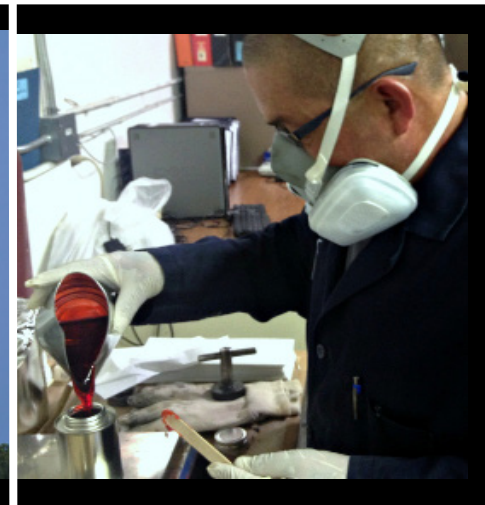


Product Selection Guide

Bacon Aerospace Adhesives

Located in Irvine, California, Bacon Industries specializes in the field of adhesives, bonding, potting, impregnating, sealing and coating systems. Our chemists and engineers supply valuable recommendations in the selection of the correct system, the ideal packaging, establishing procedures, and proper production control methods. Decades of manufacturing high quality resin systems as well as our ISO 9001/AS9100 certification ensures that we can be depended upon to provide valuable counsel in the selection and application of adhesives and other resin based systems.

Our comprehensive range of high performance adhesives and sealants have proven reliability in terms of chemical, electrical and mechanical properties. Bacon Industries is a trusted name supporting aerospace, defense, electronic, medical and other general industry applications. Ranging from low viscosity epoxy systems to thermally conductive urethanes, our products provide consistent, reliable results and adhere to several aerospace specifications. Bacon Industries also Our chemists and engineers will custom formulate a product with the properties required for a specific application. CASS Industrial Adhesives provide consistent, reliable results and always uphold the highest degree of quality.



FA Series: Fluid Adhesives

Resin	Activator	Work Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Lap Shear Strength at RT	Glass Transition Temperature, °F (Tg)	Coeff. of Thermal Expansion, 10 ⁻⁶ /°F
FA-8	BA-5	1.5	60	2/200	1.20	83	2650	165	29
FA-14	BA-45	8	2.3	8/160	1.12	84	2400	162	37
FA-48	BA-109	3	90-120	2/212+2/375	1.18	89	2100	355	29

Product Descriptions

- FA-8 - a low viscosity fluid, unfilled epoxy adhesive with good dimensional stability. Useful in applications for bonding and sealing aluminum and other metals.
- FA-14 - very low viscosity unfilled epoxy resin used for bonding components made from fused beryllium oxide, ceramics and other metals. Also useful for other bonding and impregnating applications that require an excellent wetting compound.
- FA-48 - a low viscosity epoxy resin with a high Glass Transition Temperature for high temperature applications.

FFA & FTA Series: Flexible Fluid and Flexible Thixotropic Adhesives

Resin	Activator	Work Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Lap Shear Strength at RT	Glass Transition Temperature, °F (Tg)	Coeff. of Thermal Expansion, 10 ⁻⁶ /°F
FFA-5	BA-15	2	150	2/160	1.10	65	2250		75
FFA-8	BA-15	2	150	3.5/200	1.10	82	4500	158	38
FFA-30	BA-94	2	420	2/160	1.10	78	3000		
FTA-101	BA-161	6	Paste	2/160	1.1	73	3600	113	43

Product Descriptions

- FFA-5 - A flexible general purpose adhesive.
- FFA-8 - A clear fluid epoxy-polyamide system for use as an adhesive or for potting. Features a long pot life at room temperature, good resistance to mechanical shock and has high strength if heat-cured.
- FFA-30 - A low viscosity modified epoxy-polyamide system featuring excellent wetting of various substrates. Useful in wick bonding of magnetic lamination stacks and for cementing a wide variety of materials.
- FTA-101 - A modified epoxy adhesive whose flexibility may be varied with different activator ratios. Because of its paste-like consistency, it does not run from vertical surfaces. It is useful as a general purpose adhesive for application to a wide variety of substrates.

LCA Series: Low Coefficient of Thermal Expansion Adhesives

Resin	Activator	Work Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Lap Shear Strength at RT	Glass Transition Temperature, °F (T _g)	Coeff. of Thermal Expansion, 10 ⁻⁶ /°F
LCA-4	BA-5	1	5300	2/200	1.86	92	2400	186	15
LCA-4LV	BA-5	1.5	3000	2/200	1.86	91	2300	176	15
LCA-9	BA-5	1.5	Paste	2/200	1.72	93	2200	183	12
LCA-14	-	2 at 212°F	9 at 212°F	8/212	1.80	92	2000	338	14
LCA-20	BA-40A	25 min at 160°F	-	2/160+4/200	1.99	90	2420	120	15
LCA-48A	BA-105	3	Paste	2/212+2/375	1.75	95	2000	380	14
LCA-50	BA-9	2	>4000	2/200	1.93	90	3500	190	26
LCA-127	BA-49	2.5	Paste	2/200	2.32	95	2300	170	15

Product Descriptions

- LCA-4 - a highly filled epoxy adhesive that has a low coefficient of thermal expansion, good dimensional stability, and excellent chemical resistance. It is proving useful in applications requiring bonding or hermetic sealing of metal, ceramic, glass and other substrates
- LCA-4LV - an epoxy adhesive having a low coefficient of thermal expansion, good dimensional stability and excellent chemical resistance. It is useful in applications requiring bonding or hermetic sealing of metal, ceramic, glass and other substrates. Compared to Adhesive LCA-4, Adhesive LCA-4LV is less viscous, has a longer working life and generally requires additional cure time to develop similar properties.
- LCA-9 - a filled epoxy adhesive having an exceptionally low coefficient of thermal expansion. It exhibits excellent adhesion to metal to metal and has good chemical resistance.
- LCA-14 - a filled epoxy resin adhesive having outstanding resistance to temperatures up to 400°F and low coefficient of thermal expansion.
- LCA-20 - a filled gyro grade adhesive having a low coefficient of thermal expansion and low outgassing. It exhibits excellent adhesion to aluminum, glass and other difficult to bond substrates.
- LCA-48a - a filled epoxy resin adhesive having good high temperature resistance and outstanding solvent resistance, even if cured at only 212°F. LCA-48a is useful in applications involving exposure to temperatures up to 450°F and to harsh environments.
- LCA-50 - a thermally conductive, electrically insulating epoxy adhesive. It exhibits excellent adhesion to aluminum and many hard to bond substrates, as well as exhibiting good chemical resistance.
- LCA-127 - a thermally conductive, electrically insulating epoxy adhesive. It has a paste consistency and will not run from vertical surfaces.

Potting Compounds

Resin	Activator	Pot Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Flexural Modulus (10 ⁶ psi)	Glass Transition Temperature, °F (T _g)	Coeff. of Thermal Expansion, 10 ⁻⁶ /°F
Compound 85	BA-62	>16	40	4/180	1.72	90	1.6	165	18
Compound 103	BA-99	3	100	2/140	1.55	90	0.94	124	27
Compound 124c Nat	BA-42	1	10 at 250°F	1.5/160 + 16/212	1.90	80	1.7	280 (HDT)*	14
Compound 182a	BA-182	50 min	12 at 160°F	3/160 + 16/212	1.82	-	1.8	276	12

Product Descriptions

- Compound 85 - A highly filled heat-curing system designed for use in electronic and microcircuit packaging. It is exceptionally fluid, can be handled easily at room temperature, cures in a relatively short time and has excellent electrical properties at high temperatures. Because Potting Compound 85 uses a liquid anhydride curing agent, it usually can be used over semiconductor junctions without causing poisoning failure.
- Compound 103 - A filled undiluted epoxy system with good resistance to impact and will cure at moderate temperatures. This system is recommended for potting devices such as connector shells from which wires may protrude directly through the epoxy. It adheres well to insulated wires. This system is available in a number of colors.
- Compound 124c Nat - A highly filled epoxy compound featuring low coefficient of thermal expansion, high strength and low creep. These are high performance materials useful in applications requiring high dimensional stability (especially at elevated temperatures), high strength, and outstanding resistance to outgassing in applications such as gyro motors and electromechanical devices operating in extreme environments.
- Compound 182a - Compound 182a is a highly filled high performance epoxy system featuring relatively low viscosity along with very low shrinkage stress, low coefficient of thermal expansion, high strength, high modulus of elasticity and excellent thermal shock resistance. This material is useful in applications requiring high dimensional stability and for low outgassing in end uses such as gyro motor stators, electromagnetic devices and precision electronic devices operating in extreme environments.

Coil Impregnants

Resin	Activator	Pot Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Young's Modulus (106 psi)	Yield Strength in Flexure (103 psi)	Coeff. of Thermal Expansion, 10-6/°F
CI-2	BA-1	8	5	8/212	1.18	85	0.08	13	49
CI-3	BA-4	4	20	2/200	1.18	85	0.09	12	42
CI-6	BA-45	24	8.5	4/212	1.18	85	0.10	12	40
CI-9	BA-182	24	6	4/212	1.12	86	0.20	19	31

Product Descriptions

- CI-2 - an unfilled, low viscosity, premixed and frozen compound. Its prime application is the impregnation of electronic components containing a high percentage of fine wires where complete penetration and freedom from voids is important. Adhesive CI-2 is useful for casting and coating applications where a low viscosity material is required.
- CI-3- a pure epoxy compound and has the shortest pot life and cure cycle.
- CI-6 - a low viscosity, pure epoxy compound that featuring a longer pot life than CI-2.
- CI-9 - is a low viscosity, pure epoxy compound featuring a long pot life and low CTE.

Conductive Silver Adhesives

Resin	Activator	Pot Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore D	Lap Shear Strength at RT	Heat Distortion Temperature, °F	Volume Resistivity, ohm-cm
Conducting 20/20	BA-66B	1	Paste	2/200	2.70	87	1800	161	0.002
LCA-24	BA-9	1	150-600	2/200	2.70	91	1800	196	0.002

Product Descriptions

- Conducting 20/20 - an electrically conductive, silver filled epoxy with a low viscosity at room temperature. Conducting 20/20 is the most fluid of the two systems, being self-leveling at room temperature and therefore, easiest to apply.
- LCA-24 - an excellent all-around system with a low coefficient of thermal expansion, better strength above 160°F, and superior long-term conductivity stability.

Flexobond Series: Urethanes

Resin	Activator	Pot Life (min)	Viscosity (cP)	Cure (hr/°F)	Specific Gravity	Hardness, Shore A	Lap Shear Strength at RT	Water Absorption (24hr immersion) at 77°F, %
Flexobond 202a	BA-400	45	12,000	2/212	1.0	73	900	0.04
Flexobond 329	BA-329	60	Paste	2/212	1.1	90	1500	-
Flexobond 430	BA-430	100	800	2/200	1.1	67	450	<0.02
Flexobond 431	BA-431	135	800	24/77 + 2/212	1.1	84	1300	0.1
Flexobond 431 White	-	100	Paste	24/77 + 2/212	1.1	85	1100	-
Flexobond 442	-	4 hours	Paste	2/180	2.0	78	500	0.14

Product Descriptions

- Flexobond 202a - A light amber liquid urethane system containing modified polybutadiene. This system gels rapidly and cures to rubbery solids. Flexobond 202a also features good adhesion to many organics and inorganics. It holds little water and should be considered as sealants, encapsulants, and general purpose adhesives. Flexobond 202a may be cured at either ambient or elevated temperatures, and the system may be handled in less than one day at 73°F.
- Flexobond 329 - A non-flowing urethane system which gels rapidly, and cures to a tough rubbery solid with good adhesion to many substrates. Flexobond 329 can be used as a fairing compound, adhesive or encapsulant. This material is capable of filling large gaps when required. Flexobond 329 may be cured at either ambient or elevated temperatures. It generally can be handled in less than six hours from the initiation of ambient cure.
- Flexobond 430 - A clear urethane system which gels rapidly and cures to a rubbery solid. The system may be utilized as an adhesive, encapsulant or casting compound. Flexobond 430 may be cured at either ambient temperature or elevated temperature. It generally can be handled in less than six hours from the initiation of ambient cure. This material is similar to the harder Flexobond 431.
- Flexobond 431 - a two-part clear urethane system, is widely used in the medical industry, meets USP XXII, Class VI-50°C/72 hours (ethylene oxide) Testing for Plastics. This urethane system gels rapidly and cures to a rubbery solid. The system can be utilized as an adhesive, encapsulant or casting compound and has good adhesion to metals, glass, and plastics, especially polycarbonate. It may be cured at either ambient or elevated temperatures and can be handled in six hours from the initiation of ambient temperature cure.
- Flexobond 431 White - Flexobond 431 White, a two-part white urethane system, is a flexible polyurethane adhesive that has a thixotropic consistency and contains a white pigment for opacity. This urethane system does not contain TDI, mercury, tin or lead, and gels rapidly to cure to a rubbery solid. The system can be utilized as an adhesive, encapsulant or casting compound and has good adhesion to metals, glass, and plastics, especially polycarbonate. The primary use of Flexobond 431 White is for anchoring electronic components and components leads used on circuit card assemblies. It may be cured at either ambient or elevated temperatures and can be handled in six hours from the initiation of ambient temperature cure.
- Flexobond 442 - Flexobond 442 is a thermally conductive flexible urethane resin system for bonding or filleting glass diodes or other stress sensitive components while simultaneously proving a heat flow path. This material has excellent electrical properties, flexibility, and is low outgassing.

SC Series: Silicone Compounds

Resin	Activator	Work Life (hr)	Viscosity (P)	Cure (hr/°F)	Specific Gravity	Hardness, Shore A	Thermal Conductivity, Btu-in/ft ² -hr-°F	Volume Resistivity, ohm-cm	Coeff. of Thermal Expansion, 10 ⁻⁶ /°F
SC-14A	BA-66B	0.5	270	24/75	1.8	65			
SC-17	BA-9	16	2500	1/212	2.23	74	4.2	8x10 ¹⁴	60

Product Descriptions

- SC-14a - Silicone Compound SC-14a is a filled silicone-based polymer which cures to a resilient solid. It has high thermal conductivity, good thermal stability, and excellent electrical properties. It is useful in electronic applications requiring a heat conductive encapsulant. The cured compound may be knife-cut for replacement of components. New compound may be poured in place and cured to re-form a tight seal.
- SC-17 - Similar to SC-14a, SC-17 features a long work life, high viscosity, and cures within an hour into a resilient silicone material.

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