

EPIC RESINS
POLYMERS FOR INDUSTRY SINCE 1958

STRUCTURAL ADHESIVES



Product	Mix Ratio by Weight	Mix Ratio by Volume	Viscosity (in cps) ASTM D2196	Weight per Gallon ASTM D1875	Gel Time ASTM D3056
EPOXY ADHESIVES					
0108	1 Component	1 Component	40,000 – 70,000	8.40 – 9.00	4 – 6 min @ 100°C or 50 – 70 sec @ 150°C**
0172	1 Component	1 Component	100,000 – 130,000	12.80 – 13.20	4 – 7 min @ 150°C**
R1003/H5002	3R:1H	2R:1H	10,000 – 14,000	10.26 – 10.59	4 hrs @ 25°C (in a 5 mil film) or 20 minutes @ 76°C (in a 5 mil film)
S7005	100A:44B	2A:1B	16,000 – 20,000	12.50 – 12.90	5 – 6 hrs @ 25°C (200 grams)
S7045	1A:1B	1A:1B	18,000 – 22,000	9.40 – 9.60	4 – 6 min @ 25°C (100 grams)
S7068	1A:1B	1A:1B	500,000 – 600,000	10.50 – 10.90	25 – 30 min @ 25°C (200 grams)
S7069	1A:1B	1A:1B	20,000 – 24,000	12.50 – 12.90	3 – 3.5 hrs @ 25°C (200 grams)
S7179-02	100A:76B	100A:78B	25,000 – 35,000	13.20 – 13.60	2 hrs @ 25°C (in a thin film) or 10 – 16 min @ 25°C (317 grams)
S7237	100A:71B	1A:1B	21,000 – 25,000	9.65 – 9.80	2.5 – 3.5 hrs @ 25°C (100 grams)
S7276	100A:86B	1A:1B	16,000 – 20,000	12.50 – 12.90	5 – 6 hrs @ 25°C (200 grams)
S7333	1A:1B	1A:1B	Non-sag Paste	11.90 – 12.30	1 – 2 hrs @ 25°C (200 grams)
S7375	100A : 85B	1A:1B	50,000 – 70,000	8.50 – 8.80	2.5 – 3 hrs @ 25°C (200 grams)
S7401	1A:1B	100A:113B	6,500 – 8,500	10.80 – 11.20	7 – 10 min @ 25°C (100 grams)
S7448	100A:28B	3A:1B	1,500 – 1,900	9.15 – 9.35	1 – 1.5 hrs @ 25°C (100 grams)
S7454	1A:1B	1A:1B	100,000 – 200,000	12.20 – 12.40	60 – 80 min @ 25°C (100 grams) or 4 – 6 min @ 80°C (20 grams)
URETHANE ADHESIVES					
RM2000	1 Component	1 Component	10,000 – 20,000	9.55 – 9.85	NA
RM2001	1 Component	1 Component	5,000 – 9,000	9.40 – 9.50	NA
RM2002	1 Component	1 Component	2,800 – 3,500	9.30 – 9.50	NA
RM2003	1 Component	1 Component	2,900 – 4,000	9.40 – 9.60	NA
S7398	100A:89.4B	1A:1B	1,000 – 1,500	8.80 – 9.05	0 – 2 min @ 25°C (100 grams)
S7399	100A:55.8B	2A:1B	3,000 – 3,500	9.60 – 9.75	1.5 – 3 min @ 25°C (100 grams)
S7400	1A:1B	1A:1B	Paste	10.35 – 10.75	15 – 25 min @ 25°C (100 grams)
S7450	100A:106.5B	1A:1B	15,000 – 20,000	10.90 – 11.10	45 – 60 min @ 25°C (100 grams)
S7470	100A:117B	1A:1B	60,000 – 110,000	9.00 – 9.20	15 – 25 min @ 25°C (100 grams)
S7511	100A:117.5B	1A:1B	750 – 850	8.90 – 9.15	11 – 16 min @ 25°C (100 grams)
ELECTRICALLY CONDUCTIVE ADHESIVES					
0113	1 Component	1 Component	200,000 – 400,000	18.50 – 19.00	5 – 6 min @ 150°C
S7023	1A:1B	1A:1B	Paste	18.65 – 18.85	12 hrs minimum @ 25°C

EPIC RESINS FORMULATES THESE AND OTHER QUALITY ADHESIVES

EPOXY ADHESIVES

0108

Epic 0108 is a one component, slightly thixotropic epoxy resin that features moderate temperature curing combined with outstanding shelf stability at normal ambient temperatures. Epic 0108 features good adhesion to many plastic and metal substrates.

0172

Epic 0172 is a one component, extremely resilient epoxy resin that features excellent thermal shock properties. Epic 0172 performs well in temperatures ranging from -40°F to over 400°F, resists cracking and provides good chemical resistance.

R1003/H5002

Epic R1003/H5002 is a low viscosity, filled epoxy adhesive system designed for use with plural component spray equipment as well as batch processing equipment. Epic R1003/H5002 is free flowing and nonabrasive. Epic R1003/H5002 develops excellent structural bonds and is useful for applications that will see temperatures ranging from -53°C to 121°C.

Product	Lap Shear (psi) ASTM D1002	Shore Hardness ASTM D2240	Cure Schedule	Bonding Substrates
EPOXY ADHESIVES				
0108	1,300 – 1,800	83 – 87 D	55 – 65 min @ 100°C or 9 – 11 min @ 150°C	A, C
0172	1,300 – 1,500	81 – 85 D	25 – 35 min @ 204°C	A, C
R1003/H5002	2,660 – 2,940	83 – 87 D	7 days @ 25°C or 1 hr @ 76°C	A, B, C, D, E, F
S7005	1,300 – 1,800	72 – 78 D	10 – 12 hrs @ 45°C or 1.5 – 2 hrs @ 100°C	A, C, D
S7045	950 – 1,250	68 – 72 D	8 – 12 hrs @ 25°C or 2 – 4 hrs @ 65°C	A, B, C, D, E, F
S7068	2,565 – 2,835	84 – 88 D	7 days @ 25°C or 2 – 2.5 hrs @ 65°C	A, B, C, D, E, F
S7069	2,050 – 2,250	82 – 88 D	12 – 14 hrs @ 45°C or 2 – 2.5 hrs @ 100°C	A, B, C, E, F
S7179-02	1,500 minimum	82 – 88 D	7 days @ 25°C or 2 hrs @ 65°C	A, B, C, E, F
S7237	3,325 – 3,675	84 – 89 D	22 – 26 hrs @ 25°C or 4.5 – 5.5 hrs @ 50°C	A, C, D
S7276	380 – 420	78 – 82 A	3 – 5 days @ 25°C or 2 hrs @ 100°C	A, C, D, F
S7333	1,400 – 1,800	80 – 84 D	7 days @ 25°C or 2 hrs @ 65°C	A, C, D
S7375	3,400 – 3,700	83 – 87 D	7 days @ 25°C or 4 – 6 hrs @ 60°C	A, B, C, D, E, F
S7401	5,422 – 5,992	77 – 83 D	7 days @ 25°C or 24 hrs @ 25°C plus 2 hrs @ 85°C	A, B, C, D, E, F
S7448	2,000 minimum	80 – 85 D	1 hr at 99°C or 45 min @ 107°C	A, C, F
S7454	1,190 – 1,510	89 – 91 D	2 – 3 hrs @ 25°C or 1 – 3 hrs at 63°C	A, B, C, D, E, F
URETHANE ADHESIVES				
RM2000	50 – 100	Rigid	12 – 24 hrs @ 25°C (50%RT)	A, B, C, D, E, F
RM2001	600 – 800	Flexible	2 hrs @ 25°C after water mist	A, B, C, D, E, F
RM2002	500 – 700	Flexible	12 hrs @ 25°C (50%RH)	A, B, C, D, E, F
RM2003	350 – 450	Rigid	4 – 5 hrs @ 25°C	A, B, C, D, E, F
S7398	60 – 70 (polycarbonate)	48 – 53 A	24 hrs @ 25°C or 2 hrs @ 65°C	B, D, F
S7399	2,300 – 2,700	87 – 92 A	10 hrs @ 25°C or 2 min @ 75°C	A, C, D, F
S7400	1,800 – 2,100	70 – 74 D	12 hrs @ 25°C or 2 – 3 hrs @ 65°C	A, B, C, D, F
S7450	1,320 – 1,525	55 – 60 D	7 days @ 25°C or 3 – 4 hrs @ 65°C	A, C, D, F
S7470	3,000 – 3,200	60 – 65 D	7 – 14 days @ 25°C	A, B, C, D, E, F
S7511	3,000 – 3,200	60 – 65 D	7 – 14 days @ 25°C	A, B, C, D, E, F
ELECTRICALLY CONDUCTIVE ADHESIVES				
0113	1,500 – 1,800	83 – 87 D	1 hr @ 150°C	A, C, D, F
S7023	NA	85 – 89 D	1 – 2 hrs @ 120°C	A, C, D, F

A - Aluminum B - Wood C - Metals (steel, copper, iron) D - Plastics E - Masonry F - Fiberglass
 *Products have performed using suggested substrates, however, pre-production testing is always recommended.
 **These are hot plate gel times.

S7005

Epic S7005 is a modified epoxy adhesive that provides excellent bond strength to a wide variety of materials including difficult to bond vinyl substrates. Epic S7005 contains no volatiles, thereby minimizing air pollution potential and alleviating concern over government environmental controls legislation. Epic S7005 has been demonstrated to develop high bond strength in applications with foam, metal, fabric, vinyl and phenolic impregnated paper substrates. Epic S7005 has a convenient 2:1 volumetric mix ratio and is designed for use with meter mix and dispense equipment.

S7045

Epic S7045 is a two component, fast curing epoxy adhesive system. Epic S7045 features a 1:1 mix ratio, fast cure and good adhesion to a variety of substrates. This system is ideal for many applications including field repairs for wood, metal, plastic and concrete substrates.

S7068

Epic S7068 is a two component, high strength, structural adhesive designed for bonding FRP to itself or primed metals. Epic S7068 adheres extremely well to most SMC formulations with little or no surface preparation. Epic S7068 also offers good peel strength and does not sag in a 3/8 inch bead.

S7069

Epic S7069 is a solvent free, two component premium grade epoxy adhesive. This system is extremely versatile and can be utilized for a wide variety of applications from paint pads and rollers to masonry.

S7179-02

Epic S7179-02 is a two component epoxy adhesive designed to be used in manufacturing foam insulated steel doors as well as other panel bonding applications. Epic S7179-02 was formulated to be semi-flexible in a thin film with a two hour cure time.

S7237

Epic S7237 is a two component epoxy adhesive originally designed for manufacturing golf clubs. Epic S7237 features a 1:1 volumetric mix ratio and is an excellent choice when your application requires outstanding tensile shear adhesion strength.

S7276

Epic S7276 is a modified epoxy adhesive that is 1:1 by volume and provides excellent bond strength to a wide variety of materials including difficult to bond vinyl substrates. Epic S7276 is flexible, helping to minimize strain at the bond interface.

S7333

Epic S7333 is a two component epoxy adhesive designed to be a non-sag paste that cures to a rigid high strength polymer. Epic S7333 is an excellent product for vertical surface field repairs.

S7375

Epic S7375 is a two component epoxy adhesive system that offers a convenient 1:1 volumetric mix ratio. Epic S7375 was specifically designed for engineered beams and joists. Epic S7375 is also ideal for bonding many substrates including wood, metal, glass and concrete.

URETHANE ADHESIVES

RM2000

Epic RM2000 is a single component moisture cure adhesive with a moderate viscosity and a 20-30 minute work time. Epic RM2000 bonds well to a variety of substrates including PVC, rubber matting, aluminum and steel. Epic RM2000 develops ample green strength within hours after application.

RM2001

Epic RM2001 is a single component 100% solids moisture cure adhesive designed to be used with roll coaters for various panel bonding applications. Epic RM2001 has a work time of 2-3 hours followed by a quick cure, enabling the user to turn over a press quicker than other moisture cure adhesives.

S7401

Epic S7401 is a two component epoxy adhesive that features a quick thin film set time and excellent adhesion to aluminum. This product has a green strength of 475 psi after 3 hours at 25°C.

S7448

Epic S7448 is a two component, unfilled adhesive that retains a significant portion of room temperature strength at -54°C as well as at 94°C. The cured adhesive is also affected minimally by exposure to 100% RH. Epic S7448 features a convenient 3:1 volumetric mixing ratio and only requires a moderate temperature curing schedule to develop optimum properties. Epic S7448 also meets ASTM E-1794 adhesion requirements.

S7454

Epic S7454 is a two component, moderately thixotropic epoxy resin adhesive possessing superior adhesion, strength, and water resistance. Epic S7454 has a 1:1 mix ratio by weight or volume with a long pot life combined with a fast cure. Epic S7454 also features excellent initial grab which makes it especially suitable for applications where the adhesive is applied on a vertical surface.

RM2002

Epic RM2002 is a single component 100% solids moisture cure adhesive designed to be used with roll coaters for various panel bonding applications. Epic RM2002 adheres well to many substrates including PVC, and primed aluminum.

RM2003

Epic RM2003 is a 100% solids moisture cure adhesive that cures rapidly after a slight water mist. Epic RM2003 is designed to be used with a bead applicator in panel bonding applications. Epic RM2003 adheres well to many substrates including wood, PVC, and primed aluminum.

S7398

Epic S7398 is a two component urethane adhesive designed to have excellent adhesion to various plastics including ABS. Epic S7398 has excellent thermal shock properties and remains flexible over a wide temperature range.

S7399

Epic S7399 is a two component urethane adhesive designed with a fast cure at elevated temperatures and a convenient 2:1 volumetric mix ratio. Epic S7399 will adhere to a variety of substrates including flame treated HDPE, galvanized steel, painted steel, and painted aluminum.

S7400

Epic S7400 is a two component urethane adhesive designed with a convenient 1:1 mix ratio by weight or volume and a fast room temperature cure. Epic S7400 features excellent adhesion, outstanding elongation and improved stress endurance.

S7450

Epic S7450 is a two component urethane adhesive designed with a long pot life and a convenient 1:1 volumetric mix ratio. Epic S7450 has a hardness in the mid Shore D range and features high elongation.

S7470

Epic S7470 is a two component urethane adhesive designed with a light paste consistency and a convenient 1:1 volumetric mix ratio. Epic S7470 features superior adhesion to a variety of metal and plastic substrates. Epic S7470 may be utilized in electronics assembly, vertical seam sealing, and other general adhesive applications.

S7511

Epic S7511 is a two component urethane adhesive with a convenient 1:1 volumetric mix ratio. Epic S7511 is designed with superior adhesion to a variety of substrates including many plastics and metals. Epic S7511 may be utilized in applications including: automotive and outdoor lighting, filter end cap adhesives, outdoor sporting equipment, and other general adhesive applications.

ELECTRICALLY CONDUCTIVE ADHESIVES

0113

Epic 0113 is an electrically conductive, silver-filled, one component epoxy system. Epic 0113 features excellent electrical conductivity along with easy application. Epic 0113 is stored and shipped frozen to ensure dispersion of the silver filler.

S7023

Epic S7023 is a two component, electrically conductive, silver-filled epoxy adhesive. Epic S7023 has been designed for applications where electrical conductivity along with superior bond strength are important design criteria. Epic S7023 has a convenient 1:1 mix ratio, two hour pot life and will cure at room temperature.



EPIC RESINS

QUALITY ADHESIVES FOR YOUR STRUCTURAL APPLICATION

At Epic Resins we specialize in formulating quality adhesives that meet specific application requirements. Although many of our customers rely on us for our wide variety of standard adhesives, we realize that custom made formulations are also necessary from time to time. We have the ability to analyze your application requirements and the expertise to formulate the most appropriate system for you.

In business since 1958, Epic Resins is dedicated to formulating quality products and servicing our customers. In order to achieve our goal of complete customer satisfaction, we have implemented an ISO 9001 Quality Management System and an ISO 14001 Environmental Management System.

Finally, Epic Resins commitment to service goes beyond mere specification conformance. Our Technical Sales Representatives, Research and Development, Quality Control and Customer Service departments are ready to assist you every step of the way. Epic Resins is your complete adhesive source.

COMPREHENSIVE QUALITY ASSURANCE PROGRAM

- Rigid Vendor Certification Program
- Statistical Process and Quality Control
- ISO 9001 and ISO 14001

COMMITMENT TO SERVICE

- Knowledgeable Technical Sales Representatives
- Experienced Chemists and Lab Technicians
- Continuous Research and Development
- Trained Support Staff

UNPARALLELED "CUSTOM" SERVICE

- Ability to Analyze Application Needs
- Expertise to Formulate Appropriate Adhesive Systems
- Assistance with Equipment Selection and Trouble-Shooting

EPIC RESINS
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