

Need an Adhesive to Bond Composites?

Try the 3M[™] Scotch-Weld[™] **Structural Adhesive Selector**



Start Now





Choose Your Substrate Combination

Select button to view recommended 3M[™] Scotch-Weld[™] Structural Adhesive options.



SUBSTRATE 2 Fiber-Reinforced Engineered Thermoplastics Fiber-Reinforced Thermosets Thermoplastics - Polyeolofin - PET - HDPE Nylon - Acrylic/PMMA - Polyester (FRP) - Phenolic - Polycarbonate (PC) -Polypropylene - Rigid PVC and HIPS - SMC





Select a Product

The following 3M adhesive products provide superior bonds for your selected substrates.

3M[™] Scotch-Weld[™] Epoxy Adhesive DP420NS Black



- Highly flexible epoxy
- Bonds to most substrates, including many plastics
- High strength and high peel
- 25-minute open time

View Product Details



3M[™] Scotch-Weld[™] Epoxy Adhesive DP125 Gray



View Product Details

3M[™] Scotch-Weld[™] Low Odor **Acrylic Adhesive DP810**



- Low odor adhesive
- Provides high shear and peel strength and is toughened for impact resistance
- Bonds oily metals with minimal surface prep
- Bonds most plastics
- 10-minute open time









Select a Product

The following 3M adhesive products provide superior bonds for your selected substrates.

3M[™] Scotch-Weld[™] Epoxy Adhesive DP420NS Black



- Bonds multiple materials, including metal and composites • Designed to bond multiple applications
- A high performance, two-component, urethane adhesive • Easy dispensing system

View Product Details





3M[™] Scotch-Weld[™] Multi-Material **Composite Urethane Adhesive DP6310NS**



3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP8805NS



- Low odor acrylic adhesive
- Fast rate of strength build-up
- Rapid bonds to oily and painted metals and most plastics
- 5-minute open time

View Product Details





Select a Product

The following 3M adhesive products provide superior bonds for your selected substrates.

3M[™] Scotch-Weld[™] Multi-Material **Composite Urethane Adhesive DP6310NS**



- Bonds multiple materials, including metal and composites
- Designed to bond multiple applications
- A high performance, two-component, urethane adhesive
- Easy dispensing system

- Non-sag







3M[™] Scotch-Weld[™] Acrylic Adhesive DP8410NS



- Methyl methacrylate adhesive
- High impact resistance
- Minimal surface preparation
- 10-minute open time

View Product Details

3M[™] Scotch-Weld[™] Epoxy Adhesive DP190 Gray



- Tough, strong bonds with high shear and peel strength
- Bonds to a wide variety of different materials
- Extended work life provides additional time for adjustment
- Formulated with low viscosity for easy dispensing





Select a Product

The following 3M adhesive products provide superior bonds for your selected substrates.

3M[™] Scotch-Weld[™] Structural **Plastic Adhesive DP8010 Blue**



• 10-minute open time

View Product Details

3M[™] Scotch-Weld[™] Structural **Plastic Adhesive DP8005**









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3M[™] Scotch-Weld[™] Acrylic Adhesive DP8410NS



- Methyl methacrylate adhesive
- High impact resistance
- Minimal surface preparation
- Non-sag
- 10-minute open time

View Product Details

3M[™] Scotch-Weld[™] Multi-Material **Composite Urethane Adhesive DP6310NS**

- Bonds multiple materials, including metal and composites • Designed to bond multiple applications
- A high performance, two-component, urethane adhesive • Easy dispensing system





3M[™] Scotch-Weld[™] Epoxy Adhesive DP190 Gray



- Tough, strong bonds with high shear and peel strength
- Bonds to a wide variety of different materials
- Extended work life provides additional time for adjustment
- Formulated with low viscosity for easy dispensing

View Product Details







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3M[™] Scotch-Weld[™] Multi-Material **Composite Urethane Adhesive DP6310NS**



- Bonds multiple materials, including metal and composites
- Designed to bond multiple applications
- A high performance, two-component, urethane adhesive
- Easy dispensing system



- Bonds most plastics
- 10-minute open time

View Product Details





3M[™] Scotch-Weld[™] Low Odor **Acrylic Adhesive DP810**

• Bonds oily metals with minimal surface prep

3M[™] Scotch-Weld[™] Epoxy Adhesive DP190 Gray



- Tough, strong bonds with high shear and peel strength
- Bonds to a wide variety of different materials
- Extended work life provides additional time for adjustment
- Formulated with low viscosity for easy dispensing

View Product Details





3M[™] Scotch-Weld[™] Epoxy Adhesive DP420NS Black



3M[™] Scotch-Weld[™] Epoxy Adhesive DP420NS is a non-sag, two-part epoxy formulated to be durable and tough. This epoxy adhesive absorbs impact, resists vibration and fatigue, and provides high shear and peel strength. 3M[™] Scotch-Weld[™] Epoxy Adhesive 420NS is capable of providing durable and dependable adhesion for some of the most demanding applications.

- Non-sag, two-part epoxy features controlled flow and application
- Capable of absorbing impact and resisting vibration and fatigue, providing long-term durability
- Withstands powder coating processes
- High shear and peel strength for durable and dependable adhesion
- 20-minute work life allows time for adjustment during application

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Ove Alur -67°
DP420NS Black	2:1	180,000	20 minutes	2 hours	47	4,50

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.



3M[™] Scotch-Weld[™] Epoxy Adhesive DP125 Gray

3M[™] Scotch-Weld[™] Epoxy Adhesive DP125 is a low odor, two-part epoxy that creates strong structural and flexible bonds on metal, ceramics, wood, and many plastics. It provides the reliability and strength needed to maintain productive, cost effective results.

- Flexible for higher peel strength and better vibration resistance
- Maintains a strong bond under expansion, contraction and limited movement
- Medium viscosity helps minimize running, dripping or migration
- Flows smoothly for controlled dispensing
- Effective adhesive system for bonding, joining, gluing, attaching, assembling, encapsulating, potting, and sealing applications

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP125 Gray	1:1	52,500	25 minutes	2.5 hours	86	3,400	4,300	400	4460 SF	2550 CF	880 AF/CF	50ml, 200ml, 400ml, 5 gal

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

SF - Substrate Failure CF - Cohesive Failure AF - Adhesive Failure **KEY:**

3M[™] Scotch-Weld[™] Epoxy Adhesive DP190 Gray

- Provides tough, strong bonds with high shear and peel strength
- Capable of bonding to a wide variety of different materials
- Delivers extended work life, providing additional time for adjustment
- Formulated with low viscosity for easy dispensing

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP190	1:1	80,000	90 minutes	10 hours	56	1,500	2,500	400	2150 AF	2620 CF	1470 SF	50ml, 200ml, 400ml

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

SF - Substrate Failure CF - Cohesive Failure AF - Adhesive Failure **KEY:**

3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP810

3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP810 is a toughened, two-part, room temperature curing, acrylic adhesive specially formulated to bond oily metals, plastics and other surfaces. 3M pioneered the bonding of surfaces which have traditionally been seen as 'hard-to-bond,' such as oily metal and low surface energy plastics like polyethylene and polypropylene.

- Low odor adhesive is ideal for any setting where harsh fumes or flammability are an issue
- Provides high shear and peel strength and is toughened for impact resistance
- Bonds oily metals with minimal surface prep
- Bonds most plastics
- Effective system for joining, gluing, adhering, attaching, repairing, potting, panel bonding, adhering, and structural bonding

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP810	1:1	20,000	10 minutes	20 minutes	30	1,200	3,600	500	3300 AF	3940 SF	810 AF	50ml, 200ml, 1 gal, 5 gal, 20 liter

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

3M[™] Scotch-Weld[™] Structural Plastic Adhesive DP8010 Blue

3M[™] Scotch-Weld[™] Structural Plastic Adhesive DP8010 is a two-part, acrylic-based adhesive specially formulated to bond many low surface energy plastics, including many grades of polypropylene, polyethylene and thermoplastic elastomers (TPEs) without special surface preparation.

- Creates a strong bond on low surface energy plastics with minimal or no prep required
- Resists many chemicals, water, humidity, and corrosion
- Medium viscosity allows controlled dispensing
- Formulated to bond dissimilar substrates for multiple uses in the same application
- Strong adhesive can replace screws, rivets, plastic welding, and twostep processes

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP8010 Blue	10:1	20,000	10 minutes	1 hour	14	2,700	2,700	500	2400 CF	2050 CF	1010 SF	45ml, 490ml, 1 gal, 5 gal, 55 gal

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

DP8010	Blue
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SF - Substrate Failure CF - Cohesive Failure AF - Adhesive Failure **KEY:**

3M[™] Scotch-Weld[™] Structural Plastic Adhesive DP8005

3M[™] Scotch-Weld[™] Structural Plastic Adhesive DP8005 is a 10:1 ratio, two-part, acrylic-based adhesive specially formulated to bond many low surface energy plastics. It will adhere many grades of polypropylene, polyethylene, and thermoplastic elastomers (TPEs) without special surface preparation.

- Ability to structural bond low surface energy plastics such as polyolefins, polypropylene, polyethylene, and TPEs
- Excellent resistance to water and humidity, combined with very good chemical resistance, results in a bond that can withstand a variety of applications and conditions
- Cures at room temperature without heat or other chemicals to eliminate complex adhesion processes
- One-step process results in a strong bond on low surface energy plastics, minimizing or eliminating pre-treatment or preparation of the substrates prior to bonding
- Solvent-free adhesive system

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP8005	10:1	25,000	3 minutes	3 hours	42	875	2,000	475	2270 CF	2570 CF	1500 SF	35ml, 250ml, 1 gal, 5 gal, 50 gal

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

3M[™] Scotch-Weld[™] Acrylic Adhesive DP8410NS

3M[™] Scotch-Weld[™] Acrylic Adhesive DP8410NS is a non-sag, toughed, twopart acrylic adhesive. It provides improved adhesion to many plastics and metals, including those with slightly oily surfaces. It's a durable adhesive that features a fast rate of strength build to provide structural strength in just minutes.

- Durable finished bond with excellent shear and high impact strength
- Bonds difficult surfaces such as powder coats and oily surfaces
- Fast adhesion reduces waiting and maximizes work efficiency
- High strength, easy plastic bonding
- Glass bead technology to control bond line thickness and produce consistent quality

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP8410NS	10:1	70,000	10 minutes	20 minutes	54	N/A	3,600	900	4570 CF	2310 AF	1170 SF	45ml, 490ml, 5 gal, 55 gal

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

3M[™] Scotch-Weld[™] Multi-Material Composite Urethane Adhesive DP6310NS

3M[™] Scotch-Weld[™] Composite and Multiple Material Bonding Adhesive is a two-part urethane adhesive that is used to bond most types of composites, metals and multiple materials together. This product is fast drying, with a 10-minute work time. It is designed to bond multiple applications and is ideal for bonding composites.

- A high performance, two-component urethane adhesive
- Along with metals, bonds SMC and FRP (traditional fiberglass) materials to each other and to metal frames
- Easy dispensing system

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP6310NS	1:1	Paste	10 minutes	30 minutes	23	2000 CF	2050 CF	2300 CF	3200 SF	2400 SF	1000 SF	TBD

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

SF - Substrate Failure CF - Cohesive Failure AF - Adhesive Failure **KEY:**

3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP8805NS

3M[™] Scotch-Weld[™] Low Odor Acrylic Adhesive DP8805NS is a low-odor, non-sag, toughened, two-part acrylic adhesive. This adhesive is an ideal choice for a wide variety of industrial and commercial applications since it cures twice as fast as most other competitive acrylic adhesives with a comparable open time.

- Durable finished bond with excellent shear and high impact strength
- Low odor and non-flammable properties for a safer working environment compared to typical acrylic adhesives
- Bonds difficult surfaces such as powder coats and oily surfaces
- Fast adhesion and drying time reduces waiting and maximizes work efficiency
- Features glass shimming beads to control bond line thickness to prevent excessive squeeze out

	Mix Ratio (Volume) B:A	Approximate Viscosity (cP) 75°F (24°C)	Approximate Mixed Work Life 75°F (24°C)"	Approximate Time to Handling Strength 75°F (24°C)	Floating Roller Peel (pli) 75°F (24°C)	Overlap Shear Aluminum (psi) -67°F (-55°C)	Overlap Shear Aluminum (psi) 75°F (24°C)	Overlap Shear Aluminum (psi) 180°F (82°C)	Overlap Shear Carbon Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Glass Fiber- Reinforced Epoxy (psi) 75°F (24°C)	Overlap Shear Sheet Molding Compound (SMC) (psi) 75°F (24°C)	Available Sizes
DP8805NS	10:1	80,000	10 minutes	20 minutes	30	N/A	3,600	900	3930 AF	3150 CF	750 AF	45ml, 400ml, 5 gal, 55 gal

*Aluminum was acid etched before bonding.

*Composite materials were prepped with an IPA wipe/abrade/IPA wipe surface preparation method.

