





## Non-Structural Adhesives

### 3M™ Aerosol Adhesives

Only a finger's touch puts a job-matched formulation to work on paper, plastic, cardboard, foam, metal and more. 3M Aerosol Adhesives contain no methylene chloride, chlorofluorocarbons (CFCs), or 1,1,1-trichloroethane (methyl chloroform) and are California compliant.

Product Number/Description	Spray Width	Bonding Range Surfaces One/Both	(PSI) Shear <sup>1</sup> Initial/Ultimate	Relative Adhesion		Coverage Sq. Ft./Container <sup>4</sup> (Typical)	Color	Size	UPC (021200-)	Qty./Case
				Peel Strength (PIW) <sup>2</sup>	Temperature Resistant <sup>3</sup>					
<b>3M™ FoamFast 74 Spray Adhesive</b>										
 <ul style="list-style-type: none"> <li>• Fast tack with foam-tearing strength</li> <li>• Soft, non-dimpling glue line</li> <li>• General upholstery foam bonding</li> <li>• Knife edge bonding, boxing, edge turning</li> <li>• Bonds flexible urethane or latex foam together or to wood, metal and plastic</li> </ul>	1" – 4" variable	N/R/ 15 min.	40/205	20	120°F (49°C)	260	Inverted Orange	24 fl. oz. can	07277-6	12
							Clear	24 fl. oz. can	50045-9	12
							Original Formula Orange	24 fl. oz. can	96316-2*	12
<b>3M™ Super 77™ Multipurpose Spray Adhesive</b>										
 <ul style="list-style-type: none"> <li>• Fast, aggressive tack for bonding many lightweight materials</li> <li>• High coverage</li> <li>• Low soak-in for long lasting bonds</li> <li>• Bonds gaskets in water pumps, and attaches insulation to sheet metal</li> </ul>	1-1/2"– 4" fan	15 min./ 30 min.	25/160	15	110°F (43°C)	220	Original Formula	24 fl. oz. can	96315-5*	12
							Low Mist	24 fl. oz. can	21210-9	12
<b>3M™ Rubber &amp; Vinyl 80 Spray Adhesive</b>										
 <ul style="list-style-type: none"> <li>• Neoprene-based contact adhesive with plasticizer resistance</li> <li>• Adheres stainless steel panels, stiffeners, metal kick plates, leather and most supported vinyl, plastics, laminates, wood products and rubbers (except EPDM)</li> </ul>	3"	N/R/ 1 hr.	50/400	35	200°F (93°C)	75/304	—	24 fl. oz. can	82618-4	6
<b>3M™ Hi-Strength 90 Spray Adhesive</b>										
 <ul style="list-style-type: none"> <li>• High contact bond for decorative laminate</li> <li>• Adheres to polyethylene and polypropylene to wood, metal and more</li> <li>• One minute dry time</li> </ul>	1" – 4" variable	N/R/ 15 min.	45/230	25	160°F (71°C)	100	—	24 fl. oz. can	07278-3	12

1 ATD T.M. C-700: 1/8" birch veneer bonded to 1/8" birch veneer

2 ATD T.M. C-449

3 ATD T.M. C-483: 500 g load for 1 hr. at noted temperature

4 Plastic laminate bonding @ 3-5 g/sq. ft. coverage

5 Coverage based on container sizes 24 fluid ounce or 16 fluid ounce size cans

N/R = Not Recommended







\* NOT FOR SALE IN CALIFORNIA



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**3M™ Scotch-Weld™ Plastic Adhesives, Rubber and Gasket Adhesives and Industrial Adhesive**

The Scotch-Weld™ Adhesive is a tool designed adhesive designed to provide innovative answers to a wide variety of non-structural bonding problems.

Product Number/Description	Solids Weight (Approx.)	Flash Point (Closed Cup)	Consistency	Color Dry Film	Application Method	Bonding Range	Overlap Shear Strength (PSI)		Peel Strength (PSI)	Size	UPC (021200-)	Qty./Case
							75°F (24°C)	180°F (82°C)	75°F (24°C)			
<b>3M™ Scotch-Weld™ Nitrile High Performance Plastic Adhesive 1099</b>												
	<ul style="list-style-type: none"> <li>• Fast drying and heat curable</li> <li>• Resists weathering, water, oil, plasticizer migration, aliphatic fuels</li> <li>• Meets MIL-A-13883B, Type 1 and MMM-A-189C, Class 2</li> <li>• A very strong plastic adhesive</li> <li>• Bonds most plastic and vinyl</li> </ul>											
	32%	0°F (-18°C)	Medium Liquid	Light Tan	Brush, Flow	Up to 40 min.	13061,2	6431,2	313	5 oz. tube	19808-3	36
<b>3M™ Scotch-Weld™ Nitrile High Performance Plastic Adhesive 1099L</b>												
	<ul style="list-style-type: none"> <li>• Lower viscosity</li> <li>• Sprayable version of 1099 Adhesive</li> </ul>											
	24%	0°F (-18°C)	Thin Liquid	Tan	Spray, Brush	Up to 20 min.	13061,2	6431,2	313	5 gal. pail	22578-9	1
<b>3M™ Scotch-Weld™ Nitrile High Performance Industrial Plastic Adhesive 4693H</b>												
	<ul style="list-style-type: none"> <li>• Clear, elastomeric adhesive</li> <li>• Exceptional adhesion to metal and plastic</li> <li>• Unique in its ability to bond hard-to-hold materials like polypropylene, polyethylene and high impact polystyrene</li> </ul>											
	36%	1°F (-17°C)	Medium Liquid	Clear	Flow, Brush	Up to 60 min.	—	—	223	5 oz. tube	30088-2	36
<b>3M™ Scotch-Weld™ Nitrile High Performance Rubber and Gasket Adhesive 847</b>												
	<ul style="list-style-type: none"> <li>• Quick drying and flexible with fuel and oil resistance</li> <li>• Heat and solvent reactivatable</li> <li>• Curable with heat</li> </ul>											
	36%	0°F (-18°C)	Medium Liquid	Brown	Flow, Brush	Up to 15 min.	2004	94	403	5 oz. tube	19718-5	36
										1 qt.	19721-5	12
<b>3M™ Scotch-Weld™ Neoprene High Performance Rubber and Gasket Adhesive 1300</b>												
	<ul style="list-style-type: none"> <li>• High immediate strength</li> <li>• Fast-drying and heat resistant for rubber and metal</li> </ul>											
	37%	-14°F (-26°C)	Medium Liquid	Yellow	Flow, Brush	Up to 12 min.	5491	1364	523	5 oz. tube	19868-7	36
<b>3M™ Scotch-Weld™ Industrial Adhesive 4799</b>												
	<ul style="list-style-type: none"> <li>• Brushable paste consistency with low soak-in on porous surfaces</li> <li>• Can bond EPDM rubber</li> </ul>											
	36%	-14°F (-26°C)	Thin Paste	Black	Brush, Trowel	Up to 15 min.	—	—	283	5 oz. tube	21354-0	36

1 Aluminum to aluminum @ 0.1 inches/minute  
 2 Bonds heat cured for 15 minutes @ 324°F (162°C), 150 PSI  
 3 Canvas to cold rolled steel @ 2.0 inches/minute separation rate  
 4 Birch plywood to birch plywood @ 0.1 inches/minute separation rate

Non-Structural Adhesives

**3M™ Sealants**

Help keep air, dirt, fuel, cold, heat or other elements in or out, you'll find formulations from acrylic to polyurethane.








Product Number/Description	Solids Weight (Approx.)	Flash Point (Closed Cup)	Consistency	Color (Dry)	Application Method	Cure or Dry Time	Service Temperature Range	Size	UPC (02100-)	Qty./Case
<b>3M™ Polyurethane Sealant 540</b>										
	<ul style="list-style-type: none"> <li>• Polyurethane</li> <li>• One-component</li> <li>• Moisture cures rapidly to flexible seal/bond for many plastics, metal, wood and more</li> <li>• 250 psi tensile strength</li> </ul>									
	90%	136°F (58°C)	Mastic	Gray	Hand or Pressure Caulk	24 hours (3/16" dia. bead)	-40° to 194°F (-40° to 90°C)	10.5 oz. cartridge	41594-4	12
								400ml sausage pack	96277-6	12
<b>3M™ Polyurethane Adhesive Sealant 560</b>										
	<ul style="list-style-type: none"> <li>• Similar to 540 but with 580 psi tensile strength</li> <li>• May replace mechanical fasteners</li> <li>• Polyurethane</li> <li>• One-component</li> <li>• Moisture cures rapidly to flexible seal/bond for many plastics, metal, wood and more</li> </ul>									
	90%	136°F (58°C)	Mastic	Gray	Hand or Pressure Caulk	24 hours (3/16" dia. bead)	-40° to 194°F (-40° to 90°C)	1/10 gallon cartridge	41596-8	12
<b>3M™ Scotch-Seal™ Tamper Proof Sealant 1252</b>										
	<ul style="list-style-type: none"> <li>• Fire retardant seal</li> <li>• Resists oil, gasoline, water, jet fuel and fungus</li> <li>• Will not corrode metal</li> <li>• Tack-free in 20 seconds</li> </ul>									
	70%	20°F (-7°C)	Thin Paste	White	Pressure-Flow Gun	24 hours (1/8" dia. bead)	-20° to 250°F (-29° to 121°C)	5 oz. tube	20193-6	36
<b>3M™ Scotch-Seal™ Metal Sealant 2084</b>										
	<ul style="list-style-type: none"> <li>• Seals metal to glass in windows and doors</li> <li>• Resists weather, water, oil and gasoline</li> </ul>									
	46%	0°F (-18°C)	Heavy Liquid	Aluminum	Brush or Flow	24 hours (1/8" dia. bead)	-30° to 250°F (-34° to 121°C)	5 oz. tube	20227-8	36

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## Structural Adhesives

## 3M™ Scotch-Weld™ Epoxy and Acrylic Adhesives

Used as an alternative for mechanical or fusion fastening due to its greater design latitude, cleaner lines, lighter weight, greater durability, less machining and often less cost.

Product Number/Color/Description	Mix Ratio (Vol) B:A	Approx. <sup>2</sup> Viscosity 75°F (24°C) (CPS)	Approx. <sup>3</sup> Worklife at 75°F (24°C)	Ave. T-Peel <sup>4</sup> at 75°F (24°C) (PIW)	Overlap Shear Strength <sup>5</sup> (PSI)			Size	UPC (021200-)	Qty./ Case
					-67°F (-55°C)	75°F (24°C)	180°F (82°C)			
<b>3M™ Scotch-Weld™ Epoxy Adhesive DP100 Clear</b>										
	<ul style="list-style-type: none"> <li>• Fast cure rigid epoxy</li> <li>• 15–20 minute handling strength</li> <li>• Transparent when cured</li> </ul>									
	1:1	13,000	4 min.	2	900	1500	300	1.7 fl. oz	22648-9	12
<b>3M™ Scotch-Weld™ Epoxy Adhesive DP100 Plus</b>										
	<ul style="list-style-type: none"> <li>• Higher peel and shear strength version of 178-100</li> </ul>									
	1:1	8,500	4 min.	10	3000	3500	200	1.7 fl. oz.	87195-5	12
<b>3M™ Scotch-Weld™ Epoxy Adhesive DP420 Off-White</b>										
	<ul style="list-style-type: none"> <li>• Medium worklife, toughened epoxy</li> <li>• 1–2 hours handling strength</li> <li>• Tough, durable structural bonds</li> <li>• Very high performance, two-part epoxy adhesive</li> <li>• Great for bonding metal, plastic and wood</li> </ul>									
	2:1	30,000	15 min.	50	4500	4500	1260	1.2 fl. oz.	82236-0	12
<b>3M™ Scotch-Weld™ Epoxy Adhesive 2216 B/A Gray</b>										
	<ul style="list-style-type: none"> <li>• Long worklife flexible epoxy</li> <li>• 8–12 hrs. handling strength</li> <li>• Bonds plastic, metal and other dissimilar materials</li> </ul>									
	2:3	80,000	90 min.	25	2000	2500	400	Quart Kit	20356-5	6
<b>3M™ Scotch-Weld™ Epoxy DP460 Off-White</b>										
	<ul style="list-style-type: none"> <li>• Long worklife toughened epoxy</li> <li>• 2–4 hours handling strength</li> <li>• Very high performance epoxy adhesive</li> <li>• Great for bonding a wide variety of materials with outstanding reliability and durability</li> </ul>									
	2:1	30,000	60 min.	60	4500	4500	700	1.25 fl. oz.	82225-4	12

1 Color is mixed if two-part product

2 Brookfield viscometer viscosity values are typical values for the mixed product

3 The time during which an adhesive will adequately wet-out on a substrate

4 180° peel tested on .030" aluminum per ASTM D 1876-61T

5 Tested per ASTM D 1002-64

Note: The technical information and data on these pages should be considered representative or typical only and should not be used for specification purposes.

Product Number/Color/Description	Mix Ratio (Vol) B:A	Approx. <sup>2</sup> Viscosity 75°F (24°C) (CPS)	Approx. <sup>3</sup> Worklife at 75°F (24°C)	Ave. T-Peel <sup>4</sup> at 75°F (24°C) (PIW)	Overlap Shear Strength <sup>5</sup> (PSI)			Size	UPC (021200-)	Qty./ Case
					-67°F (-55°C)	75°F (24°C)	180°F (82°C)			

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



- Acrylic bonds many metals and plastics without surface prep
- Fast strength buildup
- Fully cured in 8 hours
- Low odor
- High peel and shear strength on slightly oily steel, aluminum, glass and painted surfaces

1:1	18,000 – 30,000	8–10 min.	30	1200	3600	500	1.7 fl. oz.	49077-4 (Black)	12
								31310-3 (Tan)	12

**3M™ Scotch-Weld™ Low Odor Acrylic Adhesive DP810NS Clear**



- Non-sag version of DP810
- 10-15 minute handling strength

1:1	90,000 – 95,000	8–10 min.	20	1200	4000	500	1.7 fl. oz.	49082-8	12
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**3M™ Scotch-Weld™ Structural Plastic Adhesive DP8005**



- 2-part acrylic adhesive bonds to polyethylene and polypropylene with no surface preparation
- Tough bond strength to resist vibration and impact
- Bonds most difficult-to-bond LSE (low surface energy) plastics

10:1	27,500	2.5–3 min.	16	—	2000	300	35mL	41547-0 (Translucent)	12
								45167-6 (Black)	12

Product Number/Color/Description	Mix Ratio (Vol) B:A	Approximate Mixed Viscosity at 72°F (22°C)	Approximate Work Life at 72°F (22°C)	Approximate Time to Structural Strength at 72°F (22°C)	Overlap Shear to Aluminum (PSI)		Floating Roller Peel to Aluminum at 72°F (22°C)	Size	UPC (051115-)	Qty./ Case
					72°F (22°C)	180°F (82°C)				

**3M™ Scotch-Weld™ Low Odor Acrylic Adhesive DP8810NS Green**

**NEW!**



- 10 minute work life
- Low odor
- Fast rate of strength build up

10:1	80,000	10 min.	20 min.	3,600	800	30 piw	45mL	68960-4	12
							490mL	68962-8	6

**3M™ Scotch-Weld™ Low Odor Acrylic Adhesive DP8805NS Green**

**NEW!**



- 5 minute work life
- Low odor
- Fast rate of strength build-up

10:1	80,000	5 min.	10 min.	3,600	900	30 piw	45mL	68958-1	12
							490mL	68959-8	6

**3M™ Scotch-Weld™ Acrylic Adhesive DP8405NS Green**

**NEW!**



- 5 minute work life
- High impact resistance
- Minimal surface prep

10:1	70,000	5 min.	15 min.	4,100	900	50 piw	45mL	68963-5	12
							490mL	68964-2	6

1 Color is mixed if two-part product

2 Brookfield viscometer viscosity values are typical values for the mixed product

3 The time during which an adhesive will adequately wet-out on a substrate

4 180° peel tested on .030" aluminum per ASTM D 1876-61T

5 Tested per ASTM D 1002-64

## Structural Adhesives


### 3M™ EPX™ Applicators and Accessories

Mixing nozzle will perform to your requirements. With consistent air pressure for easy uniform application, the Duo-Pak cartridge will give you the flow rate needed. Fast, convenient way to simultaneously meter, mix and apply two-part adhesives and potting compounds. System features handy Duo-Pak Adhesive Cartridges that snap quickly into the durable, lightweight EPX applicator. A slight squeeze on the trigger advances the plunger into the cartridge. Accurate measurement and the mixing nozzle provides thorough mixing and precise placement of material. Ideal system for assembly, maintenance and in-field service.



Product Number/Description	Size	UPC	Qty./Case
3M™ EPX™ Metal Applicator #9470 with 2:1 Plunger	50mL	021200-21789-0	10
3M™ EPX™ 50mL Pneumatic Applicator with 2:1 Plunger	50mL	021200-83528-5	1
3M™ EPX™ Plus II Applicator with 2:1 and 1:1 Plunger (manual)	50mL	021200-50004-6	10
3M™ EPX™ Plus II Square Gold Mixing Nozzle	127mm	021200-97331-4	36
3M™ EPX™ Mixing Nozzle #9742 for 50ml applicator	50mL	021200-21791-3	72
3M™ EPX™ 2:1 Plunger Assembly for 50ml applicator	—	021200-82314-5	10

## Instant Adhesives


Product Number/ Description	Base	Time <sup>1</sup> to Handling Strength (sec.)	Viscosity (CPS)	Ave. T-Peel <sup>2</sup> at 75°F (24°C) (PIW)	Overlap Shear Strength <sup>3</sup> at 75°F (24°C) (PSI)						Size	UPC (021200-)	Qty./ Case
					Steel	Alumi- num	Nitrile Rubber	Neoprene Rubber	APS	Rigid PVC			
<b>3M™ Scotch-Weld™ Instant Adhesive CA40H</b>													
													
	Ethyl	5–40	400–600	1–2	1500	1500	35*	55*	900*	1000*	1 oz.	21073-0	12

1 The time it takes assembled parts to reach a strength where further handling and processing can take place. Times will depend on surface to be bonded, temperature and humidity.


2 Tested per ASTM D1876-61T


3 Tested per ASTM D1002-64

\* Substrate Failure

Product Number/ Description	Typical Use	Color	Typical Viscosity (CPS)	Temp. Range (°F)	Time to Handling (sec.)	Full Cure (hrs.)	Bottle Size	UPC	Qty./ Case
<b>3M™ Scotch-Weld™ Metal Instant Adhesive MC100</b>									
									
	Low viscosity metal bonder	Clear	80–120	-65° to 180°	5–20	24	1 oz.	051111-91663-6	10
							1 lb.	048011-62634-5	1

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Description	Product Number	Typical Use	Color	Typical Viscosity (CPS)	Temp. Range (°F)	Time to Handling (sec.)	Full Cure (hrs.)	Bottle Size	UPC	Qty./ Case
<b>3M™ Scotch-Weld™ Threadlockers</b>										
	TL22	Screwlock—Low removal torque for small fasteners less than 1/4" (6mm) (Hand tool for removal)	Purple	1,200	-65° to 300°	<20	24	1mL	051115-31541-1	100
								10mL	048011-62601-7	10
								250mL	048011-62603-1	2
								50mL	048011-62602-4	10
	TL42	Nutlock—Medium strength, general purpose (Hand tool for removal)	Blue	1,200	-65° to 300°	<20	24	1mL	048011-62604-8	10
								10mL	048011-62605-5	10
								1L	051115-25124-5	1
								250mL	048011-62607-9	2
	TL72	High temperature studlock with gap filling for larger diameter coarse threaded parts (Heat and hand tool for removal)	Red	7,000	-65° to 300°	<20	24	1mL	051115-25133-7	10
								10mL	051115-25136-8	1
								250mL	051115-25135-1	2
								50mL	051115-25137-5	10
	TL90	Penetrating adhesive for pre-assembled fastener and porosity sealing of welds (Heat and hand tool for removal)	Green	20	-65° to 300°	<20	24	1mL	048011-62615-4	10
								10mL	051115-25150-4	1
								250mL	048011-62617-8	2
								50mL	048011-62616-1	10

<b>3M™ Scotch-Weld™ Retaining Compounds</b>										
	RT09	General Purpose — For tight tolerances and press fit augmentation	Green	125	-65° to 300°	10–30	24	10mL	048011-62661-1	10
								250mL	048011-62663-5	2
								50mL	048011-62662-8	10
	RT35*	Slip Fit/Slow Cure— High strength for slip fits	Green	2,000	-65° to 300°	10–60	24	10mL	048011-62667-3	10
								250mL	048011-62669-7	2
								50mL	048011-62668-0	10
	RT40*	Pressure Fit/Hi Temperature— Secures all types and sizes of bearings, shafts and cylindrical parts	Green	600	-65° to 400°	10–15	24	250mL	051115-25735-3	2
								50mL	051115-25734-6	10

\* Made to order.