

3M Science.
Applied to Life.™



Scotch-Weld™
Structural Adhesive

Product Selection Guide

Matching 3M Structural Adhesives to your design,
performance and process requirements

January 2019



Scotch-Weld™
Structural Adhesive

Design with Confidence. Build to Last.

In today's world, successful new products demand advancements in design, manufacturing processes and end-use performance. Industrial engineering and design professionals around the world depend on 3M™ Scotch-Weld™ Structural Adhesives to help them design beyond the limits of mechanical fasteners to create next generation products.

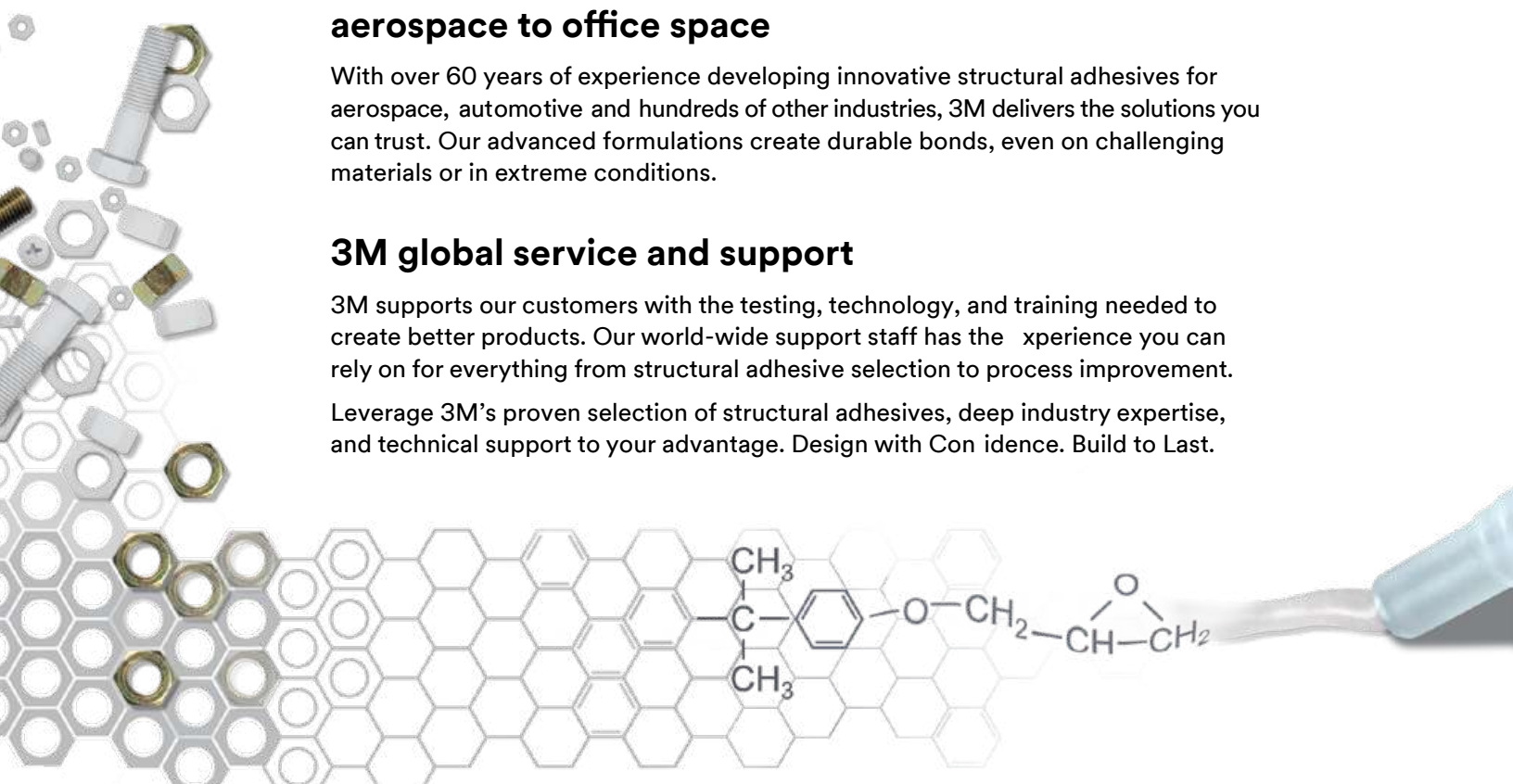
Trusted innovations from aerospace to office space

With over 60 years of experience developing innovative structural adhesives for aerospace, automotive and hundreds of other industries, 3M delivers the solutions you can trust. Our advanced formulations create durable bonds, even on challenging materials or in extreme conditions.

3M global service and support

3M supports our customers with the testing, technology, and training needed to create better products. Our world-wide support staff has the experience you can rely on for everything from structural adhesive selection to process improvement.

Leverage 3M's proven selection of structural adhesives, deep industry expertise, and technical support to your advantage. Design with Confidence. Build to Last.



**3M™ Scotch-Weld™ Structural Adhesives are
transforming the way engineers think.**

Advancing design, process and performance

The benefits of designing and building products with 3M™ Scotch-Weld™ Structural Adhesives help drive product success. Eliminating mechanical fasteners provides a wide range of benefits for all stages of product development.



Improve Aesthetics: Improve product appearance with invisible joints and smoother bond lines, reduce weight and noise, enhance corrosion and fatigue resistance, and more.

Freedom of Design: Join composites to metal, build with hard-to-bond plastics, and use thinner, lighter weight materials.



Enhance Productivity: Reduce labor and material costs, build faster with minimal surface prep and match cure rates to your process needs.

Accurate and Easy: Dispense by hand or with automated equipment, and choose from a wide range of viscosities and flow rates.



Strong, Flexible Bonds: Adhesives bond and seal simultaneously, eliminate stress concentration and absorb shock and vibration for durable bonds.

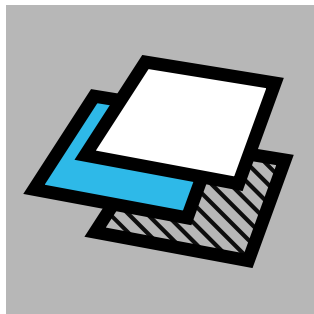
Increased Durability: Resist chemicals, environment, galvanic corrosion, fatigue, and material separation along edges or corners.

Simplifying Adhesive Decisions for Your Application

The following questions will help you narrow adhesive choices to a few possibilities for evaluation.

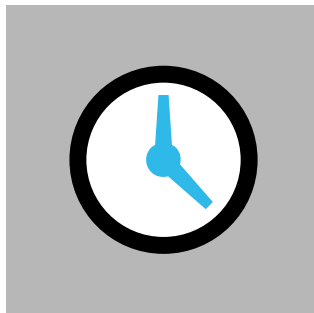
Q: What materials will be bonded?

A: Structural adhesives work by adhering to the top surface of the bonded parts, so it's important to know the exact material and condition on those surfaces. For metals, will the adhesive be applied to bare metal, or will there be a paint or coating on the surface? For plastics, exactly which base resin? Could there be residual release agents on the surfaces used for mold release?



Q: What is the preferred cure speed?

A: The chosen structural adhesive must have enough work life (open time, pot life) to allow proper mixing and application of the adhesive and assembling of the bonded parts. Smaller assemblies or shorter cycle time production processes may be able to use a faster curing adhesive with a work life of only five minutes or less, while larger assemblies that require alignment and clamping will probably need a work life of 20 minutes or more.



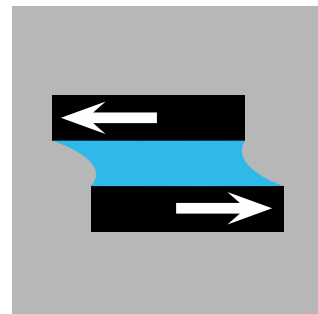
Q: What surface preparation will be required?

A: Structural adhesives generally prefer clean, rough, dry surfaces for highest bond strength. This typically means either light abrasion and solvent cleaning of the surface, or solvent cleaning followed by chemical etching or applying a primer. Adhesion tests should be performed to determine the adequate surface preparation for a specific application.



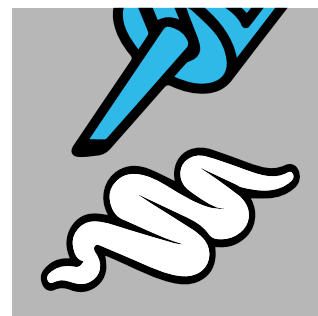
Q: What types of joints are best for structural adhesives?

A: Joint designs that put the adhesive bond under shear, tension, or compression forces will provide the highest strength. Designs that tend to apply peel or cleavage forces to the adhesive, where the applied stresses are not distributed over the entire bond area, will have lower bond strength, but the bond may still be sufficient for the needs of the application. In addition, optimum bond line thickness typically ranges from 0.005" to 0.020". The adhesive qualification process should always include testing of prototype assemblies to ensure the adhesive will provide enough performance.



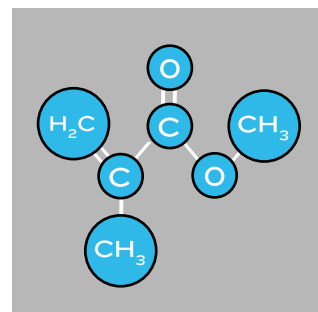
Q: How are structural adhesives used and applied?

A: Structural adhesives come in many forms, including low viscosity liquids and non-sag pastes, one- and two-component formulations, short and long work lives, and various package sizes and shapes. Most two-part structural adhesives are available in both bulk containers and convenient, easy-to-use cartridge mixing systems.



Q: What are the general characteristics of the different types of structural adhesives?

A: All structural adhesives provide at least 1,000 psi of overlap shear strength to aluminum, but the different adhesive chemistries have various properties:



- **Epoxy adhesives** come in both two-part adhesives (that cure upon mixing the two components) and one-part adhesives (that cure with temperature). They generally have the highest strength and overall performance. They also provide the best resistance to high temperatures, solvents and outdoor weathering. They adhere well to metals, woods and concrete, and the flexible epoxy adhesives also bond to some plastics and rubbers. Epoxy adhesives usually require clean, abraded surfaces to obtain maximum bond strength.

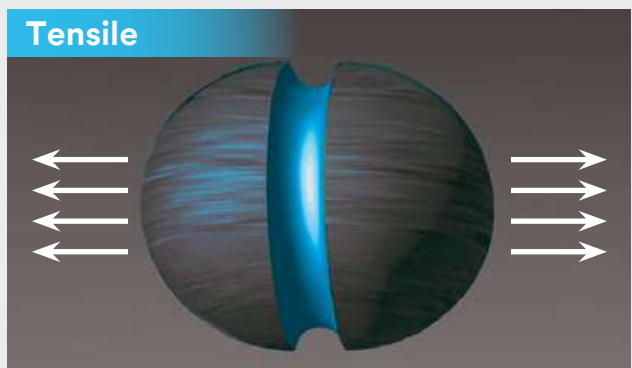
- **Acrylic adhesives** are two-part adhesives that provide excellent bond strength and durability, although slightly lower than epoxy adhesives. However, they have several features that make them easier to use in many applications and manufacturing processes. These benefits include a much faster cure speed, higher tolerance for oily or unprepared bonding surfaces and the ability to bond a wide variety of materials, including nearly all plastics. Newer acrylic adhesive formulations are room temperature stable with a long shelf life, and some have much lower odor than regular acrylic adhesives.

- **Urethane adhesives** are two-part adhesives that are relatively flexible when cured, and therefore tend to have excellent impact resistance and good adhesion to most plastics. They also bond well to woods, concrete and rubbers, but they tend to have reduced resistance to solvents and high temperatures. Uncured adhesive components are sensitive to moisture.

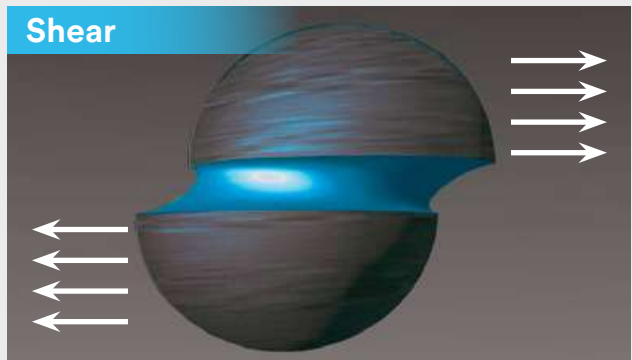
- **Cyanoacrylate adhesives** (instant adhesives) are one-component, lower viscosity liquids that cure extremely quickly with just contact pressure and surface moisture. They adhere well, with thin bond lines, to plastics, metals and rubbers. With the use of primers, they can also adhere to low surface energy plastics and elastomers. They tend to have low flexibility, peel strength and impact resistance compared to other structural adhesives. They are generally used for applications such as gasket bonding and smaller assemblies.

- **Anaerobic adhesives** are one-part adhesives that cure on active metal surfaces when oxygen gets excluded from the bond line. These products keep your factory running efficiently, reducing maintenance and leakage. They do not bond well to glass, plastics or rubbers, and are primarily used for applications such as locking threads and sealing pipe connections.

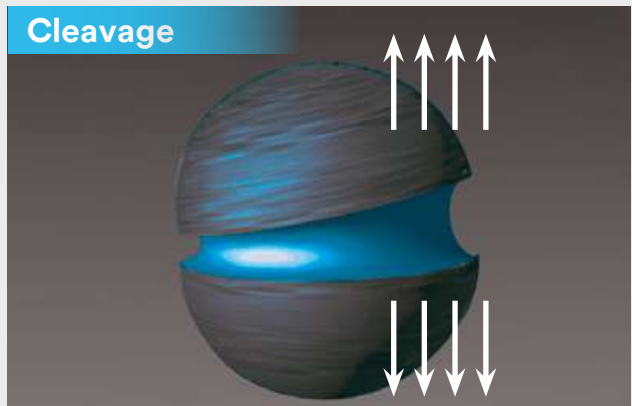
- **PUR adhesives** (Polyurethane-reactive adhesives) are one-part adhesives that apply like a hot melt, but cure with ambient moisture for near structural strength bonds. Fast set times and build strength over the next 24-48 hours can reach as much as 1,000 psi in overlap shear strength. They are flexible and resistant to temperature extremes and most solvents. Most commonly used in bonds where at least one substrate contains or transmits moisture (such as wood or plastic).



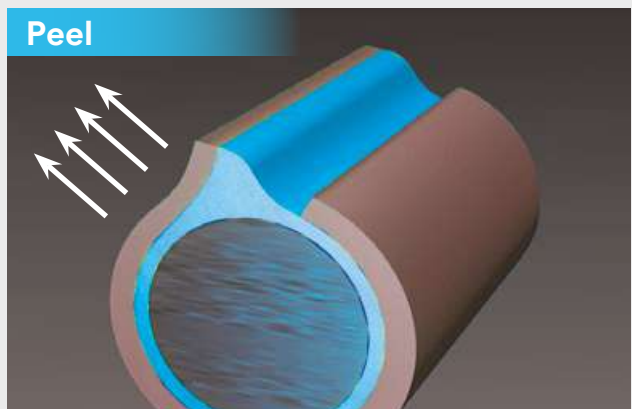
Tensile is pull exerted equally over the entire joint. Pull direction is straight and away from the adhesive bond.



Shear is pull directed across the adhesive, forcing the substrates to slide over each other.



Cleavage is pull concentrated at one edge of the joint, exerting a prying force on the bond. The other edge of the joint is theoretically under zero stress.



Peel is concentrated along a thin line at the edge of the bond where one substrate is flexible.

Key Markets & Applications

For 3M™ Scotch-Weld™ Structural Adhesives



Sporting Goods

Key Features & Benefits:

- Excellent impact resistance of high stressed bonds
- High strength for small joints
- High strength bonding of rubber, composites and metals to each other

Key Products:

DP420NS Black, DP8810NS, PR100, TS230

Specialty Vehicle

Key Features & Benefits:

- Weight reduction
- High strength
- Vibration & fatigue resistance

Key Products:

DP6330NS, DP8410NS, LSB60NS, TL42



Signage

Key Features & Benefits:

- One adhesive to bond all of your substrates
- Strong formulations and thin bond lines
- Weather resistance
- UL recognition

Key Products:

DP8805NS, DP8405NS, DP100 Plus

Metalworking

Key Features & Benefits:

- High strength and durability
- Reduced surface preparation before bonding, and no grinding after bonding
- Save weight and improve appearance with adhesives instead of welds or rivets

Key Products:

DP420NS Black, DP8407NS, DP8410NS



Electronics

Key Features & Benefits:

- Low halogen formulations available to meet customer needs
- Fast cure to speed production
- Protect sensitive electrical connections from the environment

Key Products:

DP420LH, DP8805NS, TS230, PR100



Appliance

Key Features & Benefits:

- Simplify operations by bonding after powdercoating
- Eliminate the challenge of bonding rigid to flexible substrates
- Noise damping
- Reduce complexity-bond and seal glass to metal in one step

Key Products:

DP125 Gray, DP6310NS, DP8810NS, TS230, TL42

Aerospace

Key Features & Benefits:

- Available in UL94 or FST compliant options
- Strong, yet flexible bond lines

Key Products:

2216 Gray, DP100FR, DP640, TL71



Plastic, Composite & Rubber

Key Features & Benefits:

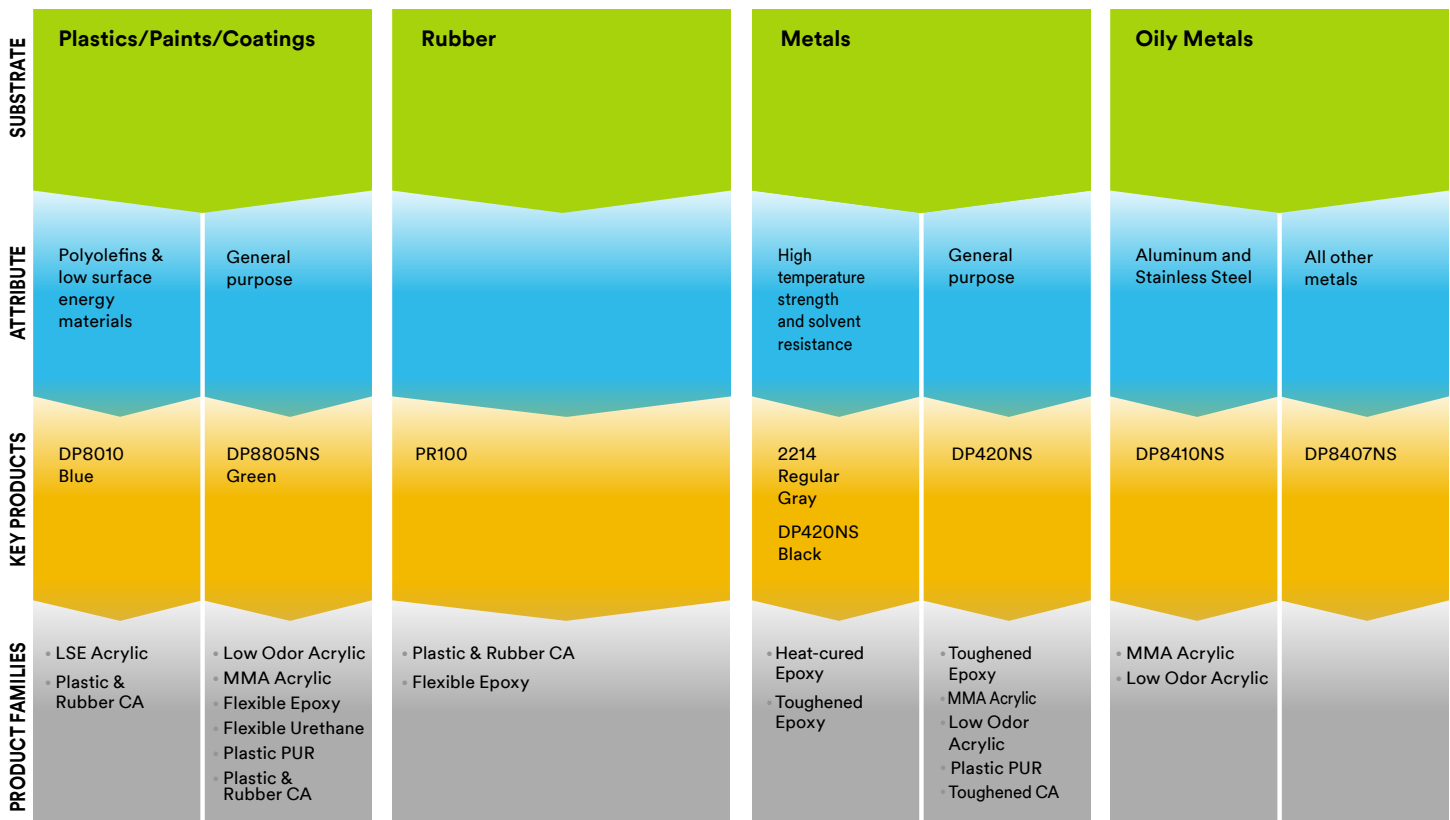
- Bonding of low surface energy plastics without priming
- Impact resistant composite bonding

Key Products:

DP8010 Blue, DP420NS, DP6310NS, TS230, PR100

3M™ Scotch-Weld™ Adhesives Selector Guide

Step 1: Select Most Difficult Substrate **Step 2: Determine Key Attribute** **Step 3: Select Product Family**



*See chart in back of guide for more details.

■ SUBSTRATE ■ ATTRIBUTE ■ KEY PRODUCT ■ PRODUCT FAMILIES

Structural Adhesive Families

Rigid Epoxy Adhesives — Higher tensile strength at lower elongations for greater long-term holding power. Mostly used for rigid substrates (metals) with high static loads.

Flexible Epoxy Adhesives — Lower tensile strength at higher elongations for greater capability to withstand differential movement of bonded parts; higher peel strength and higher adhesion to most plastics.

Toughened Epoxy Adhesives — Higher tensile strength at lower elongations for fatigue resistance; best suited for dynamic stresses. They have long-term holding power, higher peel strength, and exceptional higher resistance against shock, vibration and impact loads. Lower adhesion to most thermoplastics.

Heat-cured Epoxy Adhesives — One-component, rigid adhesives with outstanding strength at elevated temperatures. These adhesives require a thermal cure, typically around 250-350°F (120-180°C) for 40-60 minutes.

MMA Acrylic Adhesives — Provides greater adhesion to a wide variety of materials including most plastics and paint systems, are tolerant of many surface contaminations. High impact resistance for metal bonds.

Low Odor Acrylic Adhesives — Less odor than typical acrylic adhesives and faster rate of strength build than most two-part structural adhesives. Excellent adhesion to a variety of materials, including plastics and paint systems. They provide high impact resistance for plastic bonds; and are tolerant of many surface contaminations.

LSE Acrylic Adhesives — Outstanding adhesion to polyolefin materials such as polypropylene, polyethylene and TPO without surface treatment.

Semi-rigid Urethane Adhesives — Higher tensile modulus and lower elongation capability, with greater long-term holding power.

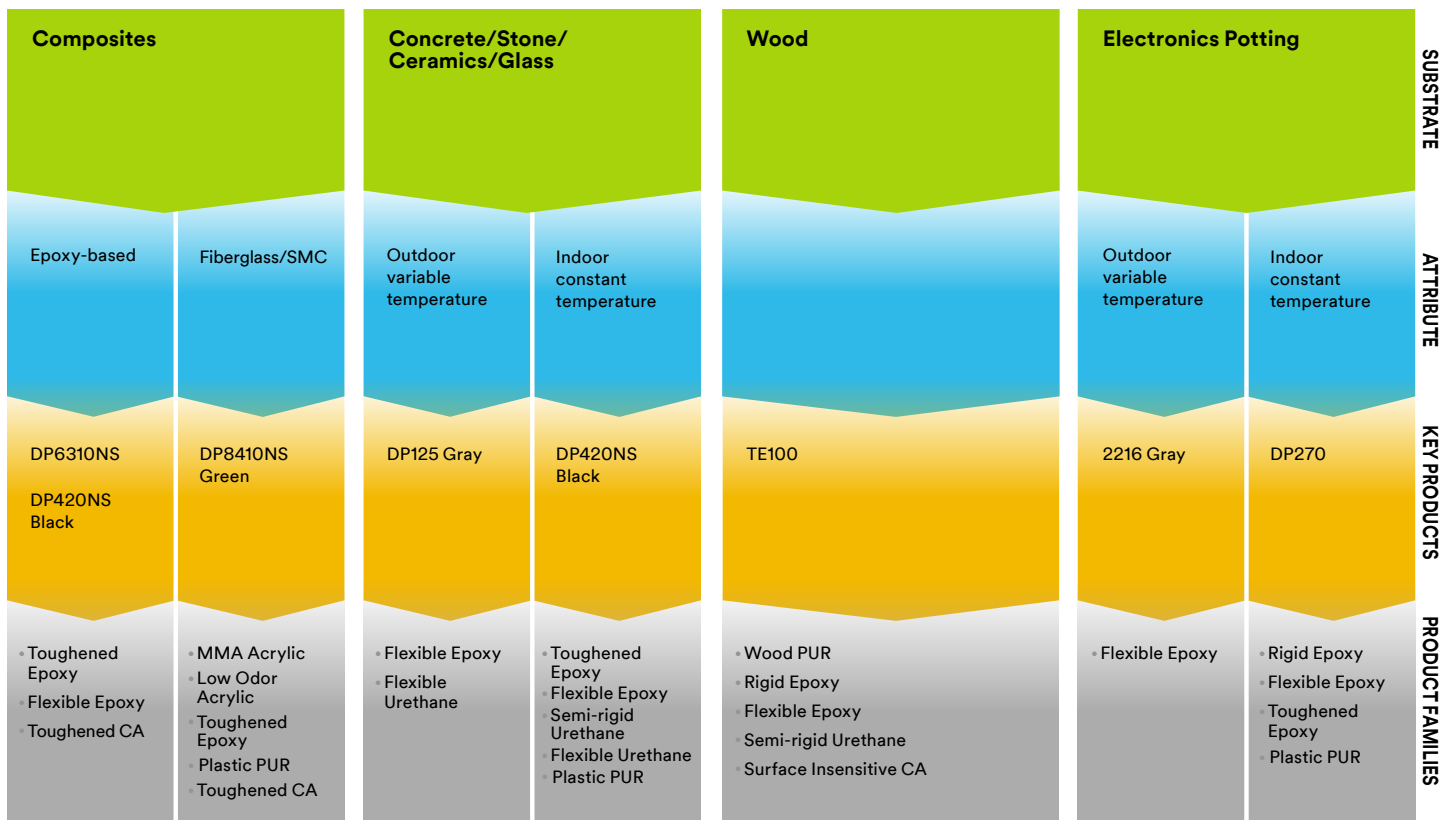
Flexible Urethane Adhesives — Lower tensile modulus and higher elongation capability. Excellent adhesion to most plastics.

Instant Adhesive Families

Plastic & Rubber (PR) Instant Adhesives bond to the widest variety of materials, have an extremely fast cure speed, and come in a wide range of viscosity.

Surface Insensitive (SI) Instant Adhesives cure even on acidic surfaces (such as wood, paper, leather, and ceramic); these adhesives have a slower cure speed than traditional instant adhesives.

Step 1: Select Most Difficult Substrate **Step 2: Determine Key Attribute** **Step 3: Select Product Family**



*See chart in back of guide for more details.

SUBSTRATE **ATTRIBUTE** **KEY PRODUCT** **PRODUCT FAMILIES**

Low Odor (LO) Instant Adhesives provide a reduced blooming effect for applications that require an improved appearance.

General Purpose (EC) Instant Adhesives are slightly less expensive products that have lower strength and impact resistance compared to traditional instant adhesives.

Super Fast (SF) Instant Adhesives provide the fastest rate of cure speed for most applications.

Rubber Toughened (RT) Instant Adhesives can be used for applications that require improved impact strength or vibration resistance; preferred for applications bonding two rigid materials together.

Metal (MC) Instant Adhesives provide improved performance on metal substrates.

Engineered Grade (EG) Instant Adhesives provide excellent overall performance for most applications.

Anaerobic Adhesive Families

Threadlockers (TL) hold screws and other threaded fasteners in place to prevent loosening from shock, vibration, and thermal expansion and contraction; these adhesives replace lock washers and nylon-insert nuts.

Retaining Compounds (RT) bond and seal non-threaded cylindrical metal assemblies, such as press-fit or slip-fit parts; these adhesives replace keys, splines, and set screws.

Pipe Sealants (PS) provide a pressure seal on threaded tubes and pipes; these adhesives replace various tapes and pastes.

Gasket Makers (GM) fill voids between metal parts to create a form-in-place gasket; these adhesives replace o-rings and pre-formed gaskets.

PUR Adhesive Families

Wood PUR – Higher shear strength at lower elongations for long term holding power. Mostly used for rigid wood substrates and some plastics.

Plastic PUR – Higher impact strength, elongation and flexibility for greater capacity to withstand movement of bonded parts. Higher adhesion to most plastics, glass and aluminum.

Substrate Selector

Step 1: Select Substrate **Step 2: Determine Key Attribute** **Step 3: Select Product** (see definitions below)

		Plastic/Paints/Coatings		Rubber	Metals			Oily Metals		Composites		Concrete/Stone/Ceramics/Glass		Wood
		Low Surface Energy	General Purpose		Temperature and Solvent Resistant	Stainless Steel & Aluminum	Other Metals	Stainless Steel & Aluminum	Other Metals	Fiberglass/ SMC	Epoxy	Indoor	Outdoor	
Plastic/Paints/Coatings	Low Surface Energy	LSE Acrylic* Plastic & Rubber CA	LSE Acrylic* Plastic & Rubber CA	Plastic & Rubber CA*	N/A	LSE Acrylic	LSE Acrylic	LSE Acrylic	LSE Acrylic	LSE Acrylic Toughened CA*	LSE Acrylic Toughened CA*	LSE Acrylic	LSE Acrylic	LSE Acrylic Surface Insensitive CA*
	General Purpose	LSE Acrylic* Plastic & Rubber CA	LO Acrylic MMA Acrylic Plastic PUR Flexible Epoxy Plastic & Rubber CA	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy	LO Acrylic MMA Acrylic Flexible Epoxy Plastic PUR Plastic & Rubber CA	DP8407NS Toughened Epoxy Flexible Epoxy Plastic PUR Plastic & Rubber CA	LO Acrylic MMA Acrylic	DP8407NS	Semi-rigid Urethane MMA Acrylic LO Acrylic Flexible Urethane Plastic PUR Toughened CA	Semi-rigid Urethane MMA Acrylic Flexible Epoxy Toughened Epoxy Plastic PUR Toughened CA	Flexible Epoxy Rigid Urethane Flexible Urethane Plastic PUR	Flexible Epoxy Flexible Urethane Plastic PUR	Wood PUR Flexible Epoxy Rigid Urethane Surface Insensitive CA
Rubber		Plastic & Rubber CA*	Plastic & Rubber CA* Plastic PUR	Plastic & Rubber CA*	N/A	Flexible Epoxy Plastic PUR	Flexible Epoxy Plastic PUR	N/A	N/A	Plastic & Rubber CA* Plastic PUR	Plastic & Rubber CA* Plastic PUR	Flexible Epoxy Plastic PUR	Flexible Epoxy Plastic PUR	Surface Insensitive CA* Plastic PUR Flexible Epoxy
Metals	Temperature and Solvent Resistant	N/A	Toughened Epoxy Flexible Epoxy	N/A	Toughened Epoxy Flexible Epoxy	Toughened Epoxy Flexible Epoxy	One-part Heat-cured Epoxy Toughened Epoxy	Heat-cured Epoxy	Heat-cured Epoxy	Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy	Flexible Epoxy	Toughened Epoxy Plastic PUR Flexible Epoxy
	Stainless Steel & Aluminum	LSE Acrylic	LO Acrylic MMA Acrylic Flexible Epoxy Plastic PUR Plastic & Rubber CA	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy	LO Acrylic MMA Acrylic Toughened Epoxy Flexible Epoxy Rigid Epoxy Toughened CA	Heat-cured Epoxy Toughened Epoxy	LO Acrylic MMA Acrylic	DP8407NS Heat-cured Epoxy	Semi-rigid Urethane MMA Acrylic LO Acrylic Toughened Epoxy Plastic PUR Toughened CA	Semi-rigid Urethane Toughened Epoxy MMA Acrylic LO Acrylic Plastic PUR Toughened CA	Toughened Epoxy Flexible Epoxy	Flexible Epoxy	Plastic PUR Toughened Epoxy Rigid Epoxy Flexible Epoxy Surface Insensitive CA
	Other Metals	LSE Acrylic	DP8407NS Toughened Epoxy Flexible Epoxy Plastic PUR Plastic & Rubber CA	Plastic & Rubber CA* Plastic PUR	Heat-cured Epoxy Toughened Epoxy	Heat-cured Epoxy Toughened Epoxy	Toughened Epoxy Flexible Epoxy Heat-cured Epoxy DP810	DP8407NS Heat-cured Epoxy	DP8407NS Heat-cured Epoxy	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy Heat-cured Epoxy Plastic PUR	Toughened Epoxy Heat-cured Epoxy	Flexible Epoxy	Plastic PUR Toughened Epoxy
Oily Metals	Stainless Steel & Aluminum	LSE Acrylic	LO Acrylic MMA Acrylic	N/A	Heat-cured Epoxy	LO Acrylic MMA Acrylic	DP8407NS Heat-cured Epoxy	LO Acrylic MMA Acrylic	DP8407NS	MMA Acrylic LO Acrylic	MMA Acrylic LO Acrylic Heat-cured Epoxy	N/A	N/A	N/A
	Other Metals	LSE Acrylic	DP8407NS	N/A	Heat-cured Epoxy	DP8407NS Heat-cured Epoxy	DP8407NS Heat-cured Epoxy	DP8407NS	DP8407NS Heat-cured Epoxy	DP8407NS	Heat-cured Epoxy	N/A	N/A	N/A
Composites	Fiberglass/ SMC	LSE Acrylic Toughened CA*	Semi-rigid Urethane MMA Acrylic LO Acrylic Flexible Urethane Plastic PUR Toughened CA	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane MMA Acrylic LO Acrylic Toughened Epoxy Plastic PUR Toughened CA	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	MMA Acrylic LO Acrylic	DP8407NS	Semi-rigid Urethane MMA Acrylic LO Acrylic Toughened Epoxy Flexible Epoxy Plastic PUR Toughened CA	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR Toughened CA	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane Flexible Epoxy Flexible Urethane Plastic PUR	Semi-rigid Urethane Toughened Epoxy Rigid Urethane Flexible Epoxy Plastic PUR
	Epoxy	LSE Acrylic Toughened CA*	Semi-rigid Urethane MMA Acrylic Flexible Epoxy Toughened Epoxy Plastic PUR Toughened CA	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy MMA Acrylic LO Acrylic Plastic PUR Toughened CA	Toughened Epoxy Flexible Epoxy Heat Cured Epoxy Plastic PUR	MMA Acrylic LO Acrylic Heat Cured Epoxy	Heat Cured Epoxy	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR Toughened CA	Toughened Epoxy Flexible Epoxy Plastic PUR Toughened CA	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane Flexible Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR
Concrete/Stone/Ceramics/Glass	Indoor	LSE Acrylic	Flexible Epoxy Rigid Urethane Flexible Urethane Plastic PUR	Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy	Toughened Epoxy Flexible Epoxy	Toughened Epoxy Heat Cured Epoxy	N/A	N/A	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy Rigid Urethane Flexible Urethane	Flexible Epoxy Flexible Urethane	Flexible Epoxy Plastic PUR Flexible Urethane
	Outdoor	LSE Acrylic	Flexible Epoxy Flexible Urethane Plastic PUR	Flexible Epoxy Plastic PUR	Flexible Epoxy	Flexible Epoxy	Flexible Epoxy	N/A	N/A	Semi-rigid Urethane Flexible Epoxy Flexible Urethane Plastic PUR	Semi-rigid Urethane Flexible Epoxy Plastic PUR	Flexible Epoxy Flexible Urethane	Flexible Epoxy Flexible Urethane	Flexible Epoxy Plastic PUR Flexible Urethane
Wood		LSE Acrylic Surface Insensitive CA*	Wood PUR Flexible Epoxy Rigid Urethane Surface Insensitive CA	Plastic PUR Surface Insensitive CA*	Toughened Epoxy Plastic PUR Flexible Epoxy	Plastic PUR Toughened Epoxy Rigid Epoxy Surface Insensitive CA	Plastic PUR Toughened Epoxy	N/A	N/A	Semi-rigid Urethane Toughened Epoxy Rigid Urethane Flexible Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Flexible Epoxy Plastic PUR Flexible Urethane	Flexible Epoxy Plastic PUR Flexible Urethane	Wood PUR Rigid Epoxy Toughened Epoxy Rigid Urethane Surface Insensitive CA

 **BEST IN CLASS PRODUCT**  **SUGGESTED ALTERNATE PRODUCT** *with primer

3M™ Scotch-Weld™ Structural Adhesives

Coverage Guide

Approximate Coverages for 3M™ Scotch-Weld™ Adhesives in Duo-Pak Cartridges

Bead Size Dimension* inches/mm	Linear ft/m per 37 mL (2:1 Cart.)	Linear ft/m per 43 mL (2:3 Cart.)	Linear ft/m per 45 mL (10:1 Cart.)	Linear ft/m per 50 mL (1:1 & Cart.)	Linear ft/m per 200 mL (1:1 & 2:1 Cart.)	Linear ft/m per 400 mL (1:1 & 2:1 Cart.)	Linear ft/m per 490 mL (10:1 Cart.)	Linear ft/m per 295 mL (1/10 gal. Cart.)
1/2 in (12.7 mm)	2 ft (0.6 m)	2 ft (0.7 m)	2 ft (0.7m)	2.5 ft (0.8 m)	10 ft (3 m)	21 ft (6 m)	26 ft (8 m)	20 ft (6 m)
3/8 in (9.5 mm)	3.5 ft (1 m)	4 ft (1 m)	4 ft (1 m)	4.5 ft (1 m)	18 ft (6 m)	37 ft (11 m)	45 ft. (14 m)	35 ft (11 m)
1/4 in (6.4 mm)	8 ft (2 m)	9 ft (3 m)	9 ft (3 m)	11 ft (3 m)	41 ft (13 m)	83 ft (25 m)	102 ft (31 m)	79 ft (24 m)
1/8 in (3.2 mm)	31 ft (9 m)	36 ft (11 m)	37 ft (11 m)	42 ft (13 m)	165 ft (50 m)	331 ft (101 m)	405 ft (123 m)	312 ft (95 m)
1/16 in (1.6 mm)	122 ft (37 m)	142 ft (43 m)	147 ft (45 m)	165 ft (50 m)	656 ft (200 m)	1,313 ft (400 m)	1,600 ft (488 m)	1,234 ft (376 m)

Coverages per Gallon for Various Thicknesses of 100% Solids 3M Adhesives

Wet Thickness inches/mm	Ft²/gal (m²/liter)	Gal/1,000 ft² (liter/1,000 m²)
1/2 in (12.7 mm)	3 ft² (0.1 m²)	312 gal (12,700 liter)
1/8 in (3.2 mm)	13 ft² (0.3 m²)	78 gal (3,175 liter)
1/16 in (1.6 mm)	26 ft² (0.6 m²)	39 gal (1,587 liter)
1/32 in (0.8 mm)	51 ft² (1 m²)	20 gal (794 liter)
25 mils (0.64 mm)	64 ft² (1.5 m²)	16 gal (635 liter)
5 mils (0.13 mm)	320 ft² (8 m²)	3 gal (127 liter)

Coverages per Gallon for Various Bead Sizes of 100% Solids 3M Adhesives

Bead Size Dimension* inches/mm	Approx. lineal ft/gal (m/liter)	Approx. gal/1,000 lineal ft (liter/1,000 m)
1/2 in (12.7 mm)	196 ft (16 m)	5 gal (63 liter)
3/8 in (9.5 mm)	350 ft (28 m)	3 gal (36 liter)
1/4 in (6.4 mm)	785 ft (63 m)	1.3 gal (16 liter)
1/8 in (3.2 mm)	3,130 ft (252 m)	0.3 gal (4 liter)
1/16 in (1.6 mm)	12,420 ft (1,000 m)	0.1 gal (1 liter)

* Bead size is semi-circular bead with width equal to size noted and height at center of bead equal to 1/2 the width.

NOTE: The technical information and data provided here should be considered representative or typical only and should not be used for specification purposes.

Coverage for 3M™ Scotch-Weld™ PUR Adhesives

Approximate coverage per container (linear foot per container based on 1/8" dia. bead size)

1/10 Gallon Cartridge	2 Kilo Bag	5 Gallon Pail	55 Gallon Drum
250' (76.2m)	1,650' (502.9m)	13,500' (4144.8m)	170,200' (51876.9m)

3M™ Scotch-Weld™ Rigid Epoxies

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PL (N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)			Size	UPC	Stock #
							-67°F (-55°C)	75°F (24°C)	180°F (82°C)			
* DP100 100 (Clear)	General purpose Rigid bonds	1:1	13,000	5 minutes	20 minutes	2 (4)	900 (6)	1,500 (10)	300 (2)	48.5mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08994-1 00-021200-87260-0 00-021200-87261-7 00-021200-82345-9 00-021200-82344-2	7100148763 7100075490 7000121318 7100086557 7100086558
DP100FR 100FR (Off White)	Flame retardant UL94 V-0 rating	1:1	80,000	6 minutes	20 minutes	2 (4)	1,250 (9)	2,200 (15)	800 (6)	48.5mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08989-7 00-048011-56744-0 00-048011-56743-3 00-048011-57230-7 00-048011-57229-1	7100148760 7000148268 7000028577 7010366158 7010366123
DP100NS 100NS (Translucent)	General purpose Non-sag	1:1	95,000	5 minutes	20 minutes	2 (4)	900 (6)	1,500 (10)	300 (2)	48.5mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08974-3 00-021200-87264-8 00-021200-87265-5 00-021200-82257-5 00-021200-82256-8	7100148744 7100014024 7100082554 7010367412 7010295308
DP270 270 (Black)	Rigid potting compound Non-corrosive	1:1	12,000	60 minutes	3 hours	2 (4)	1,200 (8)	2,500 (17)	300 (2)	48.5mL 200mL 400mL Gallon kit 5 gal. pail A 5 gal. pail B	00-638060-08975-0 00-021200-87836-7 00-021200-87837-4 00-021200-82263-6 00-021200-82265-0 00-021200-82264-3	7100148745 7000121252 7100082565 7000121253 7000046463 7000046439
DP270 270 (Clear)	Rigid potting compound Non-corrosive	1:1	12,000	60 minutes	3 hours	2 (4)	1,200 (8)	2,500 (17)	300 (2)	48.5mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08973-6 00-021200-87834-3 00-021200-87835-0 00-021200-82251-3 00-021200-82250-6	7100148730 4000009361 7100077143 7000028575 7000028567
1751 B/A (Gray)	Excellent void filler Rigid bonds	3:2	700,000	45 minutes	10 hours	4 (7)	1,400 (10)	2,000 (14)	500 (3)	2 oz. tube kit Pint kit Quart kit Gallon kit 5 gal. pail A 5 gal. pail B	00-021200-20100-4 00-021200-20101-1 00-021200-20103-5 00-021200-20105-9 00-021200-20108-0 00-021200-20120-2	7000121211 7000046336 7000046337 7000046339 7010309727 7010367210
1838 B/A (Green)	Multi-purpose Rigid bonds	4:5	400,000	60 minutes	8 hours	4 (7)	1,500 (10)	3,000 (21)	500 (3)	2 oz. tube kit Pint kit Quart kit Gallon kit 5 gal. pail A 5 gal. pail B	00-021200-20148-6 00-021200-20150-9 00-021200-20152-3 00-021200-20154-7 00-021200-20160-8 00-021200-20155-4	7000000810 7010295295 7000046340 7000121212 7010309728 7010367213
1838L B/A (Translucent)	Multi-purpose Rigid bonds	1:1	10,000	60 minutes	8 hours	4 (7)	2,000 (14)	2,500 (17)	300 (2)	2 oz. tube kit Quart kit 5 gal. pail A 5 gal. pail B	00-021200-22645-8 00-021200-22646-5 00-021200-82635-1 00-021200-82634-4	7010367467 7000036224 7010366157 7010330215
2158 B/A (Gray)	Multi-purpose Rigid bonds	1:1	375,000	2 hours	10 hours	3 (5)	1,500 (10)	2,000 (14)	400 (3)	Pint kit Quart kit Gallon kit 5 gal. pail A 5 gal. pail B	00-021200-20258-2 00-021200-20260-5 00-021200-20262-9 00-021200-20269-8 00-021200-20264-3	7010309731 7000046348 7010330060 7000046350 7000046349
3501 B/A (Gray)	Multi-purpose Rigid bonds	1:1	500,000	7 minutes	25 minutes	4 (7)	1,500 (10)	2,400 (16)	300 (2)	2 oz. tube kit 400mL Pint kit Gallon kit 55 gal. drum A 55 gal. drum B	00-021200-20842-3 00-021200-45184-3 00-021200-20843-0 00-021200-20846-1 00-051111-091640-7 00-051111-91639-1	7000046476 7010367460 7100010271 7010367461 7010292710 7010367462

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™ Flexible Epoxies

	Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C) (cP)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PL(N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)			Size	UPC	Stock #
								-67°F (-55°C)	75°F (24°C)	180°F (82°C)			
KEY PRODUCT	DP100 Plus 100 Plus (Clear)	Very flexible Colorless	1:1	8,500	4 minutes	20 minute	55 (98)	3,000 (21)	3,500 (24)	200 (1)	48.5mL	00-638060-08976-7	7100148750
											200mL	00-021200-87266-2	7100069498
											400mL	00-021200-87267-9	7000121255
											5 gal. pail A	00-021200-87198-6	7100046020
											5 gal. pail B	00-021200-87197-9	7100084539
	DP105 105 (Clear)	Very flexible Colorless	1:1	6,500	5 minutes	20 minute	50 (89)	3,500 (24)	2,000 (14)	150 (1)	48.5mL	00-638060-08981-1	7100148733
											200mL	00-021200-87270-9	7010309884
											400mL	00-021200-87271-6	7100076786
											5 gal. pail A	00-021200-87206-8	7000000856
											5 gal. pail B	00-021200-87205-1	7000000850
	DP110 110 (Gray)	General purpose Flexible bonds	1:1	55,000	8 minutes	20 minute	40 (71)	2,700 (19)	3,500 (24)	250 (2)	48.5mL	00-638060-08990-3	7100148777
											200mL	00-021200-87274-7	7000121312
											400mL	00-021200-87275-4	7100009581
											5 gal. pail A	00-021200-82472-2	7010299362
											5 gal. pail B	00-021200-82471-5	7010299357
	DP110 110 (Translucent)	General purpose Flexible bonds	1:1	50,000	8 minutes	20 minute	40 (71)	2,500 (17)	2,500 (17)	200 (1)	48.5mL	00-638060-08993-4	7100148762
											200mL	00-021200-87846-6	7000148270
											400mL	00-021200-87847-3	7000148269
											5 gal. pail A	00-021200-82467-8	7010366163
											5 gal. pail B	00-021200-82466-1	7010366143
KEY PRODUCT	DP125 125 (Gray)	High performance Very flexible bonds	1:1	52,500	25 minutes	2.5 hours	90 (160)	3,400 (23)	4,300 (30)	400 (3)	48.5mL	00-638060-08985-9	7100148735
											200mL	00-021200-87844-2	7000121264
											400mL	00-021200-87845-9	7100076727
											5 gal. pail A	00-021200-87218-1	7100084588
											5 gal. pail B	00-021200-87217-4	7100084538
	DP125 125 (Translucent)	High performance Very flexible bonds	1:1	15,000	25 minutes	2.5 hours	85 (151)	4,000 (28)	2,500 (17)	150 (1)	48.5mL	00-638060-08983-5	7100148734
											200mL	00-021200-87842-8	7100025419
											400mL	00-021200-87843-5	7000121262
	DP190 (Translucent)	High performance Flexible bonds	1:1	10,000	80 minutes	6 hours	60 (107)	3,500 (24)	1,200 (8)	150 (1)	48.5mL	00-638060-08980-4	7100148752
											200mL	00-021200-87838-1	7000121260
											400mL	00-021200-87839-8	7010329707
*	DP190 (Gray)	High performance Slightly flexible bonds	1:1	80,000	90 minutes	10 hours	50 (89)	1,500 (10)	2,500 (17)	400 (3)	48.5mL	00-638060-08992-7	7010410438
											200mL	00-021200-87840-4	7000121314
											400mL	00-021200-87841-1	7100076722
*	2216 B/A (Gray)	High performance Very flexible bonds	2:3	80,000	90 minutes	10 hours	50 (89)	3,000 (21)	3,200 (22)	400 (3)	43mL Duo-Pak	00-021200-56659-2	7000046357
											2 oz. tube kit	00-021200-20351-0	7000000812
											Pint kit	00-021200-20354-1	7000046358
											Quart kit	00-021200-20356-5	7000000815
											Gallon kit	00-021200-20358-9	7000000816
											5 gal. pail A	00-021200-20365-7	7000046361
											5 gal. pail B	00-021200-20360-2	7000046360
											55 gal. drum A	00-021200-20366-4	7100166318
											55 gal. drum B	00-021200-20361-9	7100166319
	2216 B/A (Translucent)	General purpose Very flexible bonds	1:1	10,000	2 hours	14 hours	70 (125)	3,000 (21)	1,700 (12)	140 (1)	2 oz. tube kit	00-021200-20851-5	7000046479
											Pint kit	00-021200-20852-2	7010310194
											Quart kit	00-021200-20854-6	7000000861
											Gallon kit	00-021200-20856-0	7000046480
											5 gal. pail A	00-021200-64981-3	7000046494
											5 gal. pail B	00-021200-64980-6	7000121307
											55 gal. drum A	00-021200-20927-7	7010330240
											55 gal. drum B	00-021200-20859-1	7010367466
	2216NS B/A (Tan)	High performance Non-sag	2:3	350,000	2 hours	10 hours	50 (89)	2,000 (14)	2,500 (17)	400 (3)	5 gal. pail A	00-021200-87180-1	7010367414
											5 gal. pail B	00-021200-87179-5	7010309882

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

***** After Key Products, consider these.

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

3M™ Scotch-Weld™ Toughened Epoxies

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C)	Approximate at 75°F (24°C) (cP)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PLI (N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)			Size	UPC	Stock #
								-67°F (-55°C)	75°F (24°C)	180°F (82°C)			
DP405 405 (Black)	Tough durable bonds High impact resistance	2:1	40,000	4 minutes	15 minutes	40 (71)	4,500 (31)	4,500 (31)	600 (4)		50mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08971-2 00-051111-07699-6 00-051111-07708-5 00-051111-07707-8	7100148728 7010365943 7010301041 7010329549
DP420 420 (Black)	Tough durable bonds High impact resistance	2:1	30,000	20 minutes	2 hours	75 (133)	4,500 (31)	4,500 (31)	1,250 (9)		50mL 200mL 400mL Gallon Kit 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-638060-08966-8 00-021200-41530-2 00-021200-41529-6 00-051115-25796-4 00-021200-41532-6 00-021200-41531-9 00-021200-41534-0 00-021200-41533-3	7100148731 7100007956 7100077148 7000046381 7000000834 7000000827 7010365967 7010309750
DP420 420 (Off White)	Tough durable bonds High impact resistance	2:1	30,000	20 minutes	2 hours	70 (125)	4,500 (31)	4,500 (31)	450 (3)		50mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08978-1 00-021200-87832-9 00-021200-87833-6 00-021200-82239-1 00-021200-82238-4	7100148736 7100077136 7100002516 7100001144 7100001145
DP420LH 420LH (Off White)	Tough durable bonds Low halogen	2:1	30,000	20 minutes	2 hours	70 (125)	4,500 (31)	4,500 (31)	1,250 (9)		200mL 400mL	00-051111-07697-2 00-051111-07696-5	7010329550 7100075336
KEY PRODUCT	DP420NS 420NS (Black)	Tough durable bonds Non-sag	2:1	180,000	20 minutes	2 hours	60 (107)	4,500 (31)	4,500 (31)	1,250 (9)	50mL 200mL 400mL 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-638060-08987-3 00-021200-39286-3 00-021200-39287-0 00-021200-31309-7 00-021200-56587-8 00-048011-58133-0 00-048011-58132-3	7100148758 7100036943 7100010680 7000000857 7000000853 7100160352 7100160334
	DP460 460 (Black)	Tough durable bonds	2:1	30,000	60 minutes	4 hours	80 (142)	4,500 (31)	4,500 (31)	700 (5)	5 gal. pail A 5 gal. pail B	00-021200-25319-5 00-021200-25318-8	7000121271 7000121265
	DP460 460 (Off White)	Tough durable bonds	2:1	30,000	60 minutes	4 hours	80 (142)	4,500 (31)	4,500 (31)	700 (5)	50mL 200mL 400mL Quart kit 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-638060-08998-9 00-021200-87830-5 00-021200-87831-2 00-021200-82226-1 00-021200-82228-5 00-021200-82227-8 00-021200-83757-9 0-00-76308-14623-8	7100148768 7000121321 7100082563 7000000874 7000000876 7000000875 7010366165 7100153215
	DP460NS 460NS (Off White)	Tough durable bonds Non-sag	2:1	125,000	60 minutes	4 hours	70 (125)	4,900 (34)	4,650 (32)	1,350 (9)	50mL 200mL 400mL 5 gal. pail A 5 gal. pail B	00-638060-08968-2 00-021200-43671-0 00-021200-43672-7 00-021200-43674-1 00-021200-43673-4	7100148751 7100069441 7100076677 7010329565 7010301036
	LSB60 (Gray)	Tough durable bonds High impact resistance	1:1	30,000	90 minutes	10 hours	15 (27)	3,400 (23)	4,500 (31)	900 (6)	400mL 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-051115-63411-6 00-051115-63416-1 00-051115-63414-7 00-051115-63418-5 00-051115-63417-8	7000046487 7010310209 7010366138 7010366162 7010310202
	LSB60NS (Gray)	Tough durable bonds Non-sag High impact resistance	1:1	180,000	90 minutes	10 hours	30 (53)	3,800 (26)	4,500 (31)	800 (6)	400mL 5 gal. pail A 5 gal. pail B 50 gal. drum A 50 gal. drum B	00-051115-63426-0 00-051115-63428-4 00-051115-63427-7 06-38060-40269-6 06-38060-40270-2	7000046491 7100079533 7100079534 7100198360 7100198390
	LSB360NS (Green)	Tough durable bonds Non-sag Extra long work life Bonds oily metals	1:1	Paste	10 hours	16 hours	30 (53)	4,000 (28)	3,900 (27)	800 (6)	400mL 55 gal. drum A 55 gal. drum B	00-051111-64291-3 00-051115-64360-6 00-051115-64391-0	7010366139 7010330243 7010299359

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™ Heat-Cured Epoxies

Product (Color)	Key Features	Approximate Viscosity at 75°F/24°C (cP)	Time (min.)	Cure Conditions		Overlap Shear: psi (MPa)					Size	UPC	Stock #
				Temp. F (°C)	Floating Roller Peel PU (N/cm) at 75°F (24°C)	-67°F (-55°C)	75°F (24°C)	180°F (82°C)	250°F (121°C)				
1386 (Cream)	High temperature strength Impact resistance	150,000	60	350 (177)	10 (18)	3,000 (21)	5,500 (38)	4,500 (31)	2,500 (17)	1 quart	00-021200-19917-2	7000046326	
1469 (Cream)	High temperature strength Low viscosity	60,000	120	350 (177)	2 (4)	3,150 (22)	3,700 (26)	3,700 (26)	3,600 (25)	1 quart 5 gal. pail	00-021200-19949-3 00-021200-19950-9	7000046328 7100056050	
2214 Hi-Den-sity (Gray)	High temperature strength Low temp curing	Paste	40	250 (121)	5 (9)	3,000 (21)	4,500 (31)	4,500 (31)	1,700 (12)	6 oz. cart. 5 gal. pail	00-021200-20813-3 00-021200-20814-0	7000021289 7010367423	
2214 Hi-Temp New Formula (Gray)	High temperature strength Environmental resistance	Paste	60	250 (121)	2 (4)	2,800 (19)	2,800 (19)	2,800 (19)	2,500 (17)	6 oz. cart. 5 gal. pail	00-021200-20833-1 00-021200-20835-5	7000046474 7010330200	
2214 Hi-Temp Original (Gray)	High temperature strength Environmental resistance	Paste	40	250 (121)	2 (4)	2,000 (14)	2,000 (14)	3,000 (21)	2,500 (17)	6 oz. cart.	00-021200-20806-5	7000121274	
2214 Non-Metallic Filled (Cream)	High temperature strength Higher insulation value	Paste	40	250 (121)	7 (12)	3,000 (21)	4,000 (28)	4,500 (31)	1,500 (10)	2 oz. tube 6 oz. cart.	00-021200-20802-7 00-021200-25496-3	7100034990 7000121273	
* 2214 Regular (Gray)	High temperature strength Low temp curing	Paste	40	250 (121)	5 (9)	3,000 (21)	4,500 (31)	4,500 (31)	1,500 (10)	6 oz. cart. 1 quart 5 gal. pail	00-021200-20344-2 00-021200-20345-9 00-021200-23047-3	7000000811 7000046356 7100111206	
2290 (Amber)	Low solids liquid coating for metal laminations	60	30	350 (177)	5 (9)	5,000 (34)	5,000 (34)	3,500 (24)	1,200 (8)	Gallon cont. 5 gal. pail 55 gal. drum	00-021200-76225-3 00-021200-76227-7 00-021200-76228-4	7000000897 7100144895 7100144896	

3M™ Scotch-Weld™ Primer

Product	Key Features	Viscosity	Color	Dry time (24°C/33°C)	Dry time (88°C)	Size	UPC	Stock #
Metal Primer 3901	Improves metal and glass adhesion and increases environmental resistance	5	Red	1 hour	30 minutes	.5 pint	62390135259	7000000907

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™ Threadlockers

3M's Threadlocker Adhesives offer a range of products including temporary, permanent and high temperature resistance. These adhesives conform to most industry recognized standards for torque and strength. TL42, TL62, TL71, TL90



3M™ Scotch-Weld™ Epoxy Adhesive DP100 Plus

3M™ Scotch-Weld Epoxy Adhesive DP100 Plus is a very flexible, fast-setting, two-part epoxy adhesive that cures clear and colorless. It provides a strong, permanent bond, even under vibration and impact and is flexible when cured, making it a good choice for bonding dissimilar surfaces.



3M™ Scotch-Weld™ Standard MMA Acrylics

	Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PL(N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)			Size	UPC	Stock #
								-20°F (-29°C)	75°F (24°C)	180°F (82°C)			
KEY PRODUCT	DP805 (Off White)	Fast strength build Minimal surface prep	1:1	110,000	3 minutes	10 minutes	35 (62)	2,500 (17)	3,500 (24)	2,200 (15)	48.5mL 200mL	00-638060-08982-8 00-021200-87828-2	7101410436 7101367390
	DP820 (Light Yellow)	Tough durable bonds Minimal surface prep	1:1	55,000	15 minutes	40 minutes	20 (36)	3,100 (21)	3,150 (22)	1,900 (13)	48.5mL 200mL 400mL	00-638060-08977-4 00-021200-89348-3 00-021200-89349-0	7101412194 7101329704 7100121258
	DP8405NS 8405NS (Green)	High impact Adhesion to most plastics	10:1	70,000	5 minutes	15 minutes	50 (89)	2,600 (18)	4,100 (28)	900 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-68963-5 00-051115-68964-2 00-051115-68981-9 00-051115-68986-4 00-051115-68980-2 00-051115-68987-1	7100009688 7100011056 7100102180 7100027430 7100101506 7100084534
	DP8407NS 8407NS (Gray)	High impact Adhesion to most plastics	10:1	20,000	7 minutes	24 minutes	50 (89)	3,400 (23)	4,500 (31)	1,400 (10)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-638060-14631-6 00-638060-14643-9 00-638060-14658-3 00-076308-86306-7 00-638061-14659-0 00-076308-98878-4	7100179482 7100179480 7100179264 7100105384 7100179442 7100104987
	DP8410NS 8410NS (Green)	High impact Adhesion to most plastics	10:1	70,000	10 minutes	25 minutes	50 (89)	3,600 (25)	4,100 (28)	800 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-70994-4 00-051115-70995-1 00-051115-68981-9 00-051115-70997-5 00-051115-68980-2 00-051115-71101-5	7100024055 7100024045 7100102180 7100084532 7100101506 7100084535
KEY PRODUCT	DP8425NS 8425NS (Green)	High impact Adhesion to most plastics	10:1	70,000	25 minutes	50 minutes	50 (89)	3,800 (26)	3,700 (26)	800 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-81303-0 00-051115-81302-3 00-051115-68981-9 00-051115-81298-9 00-051115-81414-3 00-051115-81031-6	7100078165 7100078166 7100102180 7101415048 7100101506 7100084535

3M™ Scotch-Weld™ Low Odor Acrylics

KEY PRODUCT	DP810 810 (Black)	Tough durable bond High impact resistance	1:1	20,000	10 minutes	20 minutes	30 (53)	1,200 (8)	3,600 (25)	500 (3)	48.5mL 200mL 1 gallon pail A 1 gallon pail B 4.4 gal. pail A 4.4 gal. pail B	00-638060-08967-5 00-021200-49079-8 00-048011-56712-9 00-048011-56711-2 00-021200-49081-1 00-021200-49080-4	7100148732 7100142848 71000046401 71000046385 7101365969 7101329544
	DP810 810 (Tan)	Tough durable bonds High impact resistance	1:1	20,000	10 minutes	20 minutes	30 (53)	1,200 (8)	3,600 (25)	500 (3)	48.5mL 200mL 400mL 4.4 gal. pail A 4.4 gal. pail B	00-638060-08986-6 00-021200-31311-0 00-021200-31312-7 00-021200-45233-8 00-021200-45230-7	7100148757 7100121267 7100121266 7100077450 7100077451
	DP810NS 810NS (Tan)	Tough durable bonds Non-sag	1:1	95,000	10 minutes	20 minutes	20 (36)	1,200 (8)	4,000 (28)	500 (3)	48.5mL 200mL 400mL	00-638060-08969-9 00-021200-49084-2 00-021200-49083-5	7100148748 7100069365 7100069366
	DP8805NS 8805NS (Green)	Low odor Fast rate of strength build	10:1	80,000	5 minutes	10 minutes	30 (53)	800 (5)	3,600 (25)	900 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-076308-98433-5 00-076308-98439-7 00-051115-81415-0 00-076308-98440-3 00-051115-81414-3 00-076308-98441-0	7100098631 7100097636 7100102180 7100097693 7100101506 7100097673
	DP8810NS 8810NS (Green)	Low odor Fast rate of strength build	10:1	80,000	10 minutes	20 minutes	30 (53)	900 (6)	3,600 (25)	800 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051128-99432-0 00-051128-99431-3 00-051115-81415-0 00-076308-98442-7 00-051115-81414-3 00-076308-98443-4	7100097574 7100075409 7100102180 7100097704 7100101506 7100097626
	DP8810NS (Gray)	Low odor Fast rate of strength build	10:1	80,000	10 minutes	20 minutes	30 (53)	900 (6)	3,600 (25)	800 (6)	45mL 490mL	00-076308-86152-0 00-076308-98485-4	7100097474 7101329557
	DP8825NS 8825NS (Green)	Low odor Fast rate of strength build	10:1	80,000	25 minutes	50 minutes	20 (36)	1,000 (7)	3,000 (21)	800 (6)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-81288-0 00-051115-81289-7 00-051115-81415-0 00-051115-81290-3 00-051115-81414-3 00-051115-81291-0	7100067297 7100068120 7100102180 7100067291 7100101506 7100084533

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™ Low Surface Energy (LSE) Acrylics

KEY PRODUCT	Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PL (N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)				UPC	Stock #
								-20°F (-29°C)	75°F (24°C)	150°F (66°C)	Size		
	DP8005 (Black)	Bonds polyolefins and l w surface energy materials	10:1	25,000	3 minutes	3 hours	N/A	875 (6)	2,000 (14)	475 (3)	45mL 490mL	00-051128-99352-1 00-051128-99298-2	7100089475 7100089476
	DP8005 (Off White)	Bonds polyolefins and l w surface energy materials	10:1	25,000	3 minutes	3 hours	N/A	750 (5)	2,200 (15)	500 (3)	45mL 490mL	00-051128-99349-1 00-051128-99297-5	7100088846 7100090196
	DP8010 8010 (Blue)	Bonds polyolefins and l w surface energy materials	10:1	20,000	10 minutes	1 hour	N/A	2,700 (19)	2,700 (19)	500 (3)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-71600-3 00-051115-71601-0 00-021200-49113-9 00-051115-71669-0 00-021200-49115-3 00-076308-14203-2	7100036717 7100036719 7100050479 7100036720 7000046400 7100153259
	DP8010NS 8010NS (Blue)	Bonds polyolefins and l w surface energy materials Non-sag	10:1	65,000	10 minutes	1 hour	N/A	2,700 (19)	2,700 (19)	500 (3)	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	00-051115-81451-8 00-051115-81453-2 00-021200-49113-9 00-051115-81454-9 00-021200-49115-3 00-051115-81461-7	7100036721 7100036723 7100050479 7010329562 7000046400 7100113670

3M™ Scotch-Weld™ Semi-Rigid Urethanes

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C) (cP)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PL (N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)				Size	UPC	Stock #
							-40°F (-40°C)	75°F (24°C)	180°F (82°C)				
* DP600 600 (Gray)	Concrete repair Self-leveling	1:1	6,000	1 minute	4 minutes	20 (36)	3,200 (22)	2,300 (16)	700 (5)	48.5mL 400mL 8.4 fl. z. 5 gal. pail A 5 gal. pail B	00-638060-08962-0 00-051111-98303-4 00-021200-96596-8 00-021200-96575-3 00-021200-96574-6	7100148740 7000021287 7000046375 7010130543 7010170293	
DP600NS 600NS (Gray)	Concrete repair Non-sag	1:1	Paste	1 minute	4 minutes	8 (14)	2,700 (19)	2,300 (16)	700 (5)	48.5mL 400mL	00-638060-08964-4 00-051111-98312-6	7100148747 7000046376	
DP605NS 605NS (Off White)	Semi-rigid Non-sag	1:1	150,000	5 minutes	20 minutes	40 (71)	4,000 (28)	2,000 (14)	600 (4)	48.5mL	00-638060-08997-2	7100148767	
DP6310NS (Green)	Multi-purpose Energy absorbing	1:1	Non-sag paste	9 minutes	45 minutes	20 (36)	3,500 (24)	3,600 (25)	900 (6)	48.5mL 400mL 5 gal. pail A 5 gal. pail B 50 gal. drum A 50 gal. drum B	00-076308-86407-1 00-076308-86398-2 00-076308-86782-9 00-076308-86748-5 00-076308-86783-6 00-076308-86749-2	7100109829 7100109830 7100143960 7100143915 7010415316 7010412199	
DP6330NS (Green)	Multi-purpose Energy absorbing	1:1	Non-sag paste	30 minutes	2 hours	20 (36)	3,600 (25)	3,600 (25)	1,000 (7)	48.5mL 400mL 5 gal. pail A 5 gal. pail B 50 gal. drum A 50 gal. drum B	00-076308-86431-6 00-076308-86433-0 00-076308-86780-5 00-076308-86701-0 00-076308-86781-2 00-076308-86727-0	7100109828 7100109827 7100143961 7100143701 7010409611 7010366145	
3532 B/A (Brown)	Multi-purpose Semi-rigid bonds	1:1	30,000	10 minutes	90 minutes	25 (44)	2,500 (17)	2,000 (14)	300 (2)	2 oz. kit Quart kit 5 gal. pail A 5 gal. pail B	00-021200-20878-2 00-021200-20879-9 00-021200-20935-2 00-021200-20881-2	7000000863 7000046481 7010130544 7010170296	
3535 B/A (Off White)	Multi-purpose Semi-rigid bonds	1:1	30,000	3 minutes	30 minutes	25 (44)	2,500 (17)	2,000 (14)	300 (2)	2 oz. kit Quart kit 5 gal. pail A 5 gal. pail B	00-021200-20887-4 00-021200-20888-1 00-051111-07486-2 00-051111-07485-5	7000046483 7010310199 7010366160 7010330223	

3M™ Scotch-Weld™ Flexible Urethanes

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approximate Viscosity at 75°F (24°C) (cP)	Approximate Mixed Work Life at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Floating Roller Peel PU (N/cm) at 75°F (24°C)	Overlap Shear: psi (MPa)			Size	UPC	Stock #
							-40°F (-40°C)	75°F (24°C)	180°F (82°C)			
* DP604NS 604NS (Black)	Flexible Non-sag	1:1	Paste	4 minutes	20 minutes	30 (53)	1,400 (10)	600 (4)	300 (2)	48.5mL 400mL 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-638060-08961-3 00-051111-98301-0 00-021200-96462-6 00-021200-96461-9 00-076308-14205-6 00-076308-87087-4	7100148738 7100069452 7010365926 7010367265 7010329538 7010412243
* DP620NS 620NS (Black)	Semi-flexible Non-sag	1:1	Paste	20 minutes	4 hours	40 (71)	3,000 (21)	2,500 (17)	500 (3)	48.5mL 400mL 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	00-638060-08960-6 00-048011-57287-1 00-076308-14144-8 00-076308-14135-6 00-076308-14135-5 00-076308-14146-3	7100148737 7000046372 7010329537 7010367262 7010301034 7010309744
DP640 (Brown)	Tough flexible bonds	1:1	25,000	60 minutes	8 hours	60 (107)	3,000 (21)	2,000 (14)	400 (3)	48.5mL 400mL	00-638060-08991-0 00-021200-89544-9	7100148761 7010330225
3549 (Brown)	Tough flexible bonds	1:1	25,000	60 minutes	8 hours	60 (107)	3,000 (21)	2,000 (14)	400 (3)	2 oz. kit Quart kit 5 gal. pail A 5 gal. pail B	00-021200-20901-7 00-021200-20902-4 00-021200-20942-0 00-021200-20904-8	7000046484 7000046485 7100041738 7100041737
DP5001 5001 (Black)	Flexible Conveyor belt repair	1:1	100,000	1 minute	15 minutes	N/A	N/A	600 (4)	N/A	400mL	00-051111-98296-9	7100028818

For lead times on bulk adhesives, please contact your 3M representative.

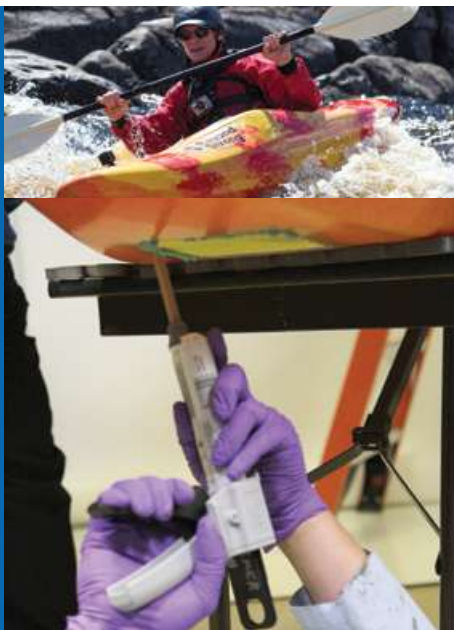
KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™ Low Surface Energy (LSE) Plastic Bonding Adhesives

3M's Low Surface Energy Structural Acrylic Adhesives bond to low surface energy plastics such as Polypropylene (PP), Polyethylene (HDPE) and most Thermoplastic Polyolefins (TPOs), providing structural adhesive bond strength that causes the plastic material to fail before the adhesive bond. **DP8010 Blue**



3M™ Scotch-Weld™ Concrete Repair Adhesives

3M's Concrete Repair Urethane Adhesives repair cracks and patch holes in minutes, providing minimal disruption to your operations. Products are available for both horizontal and vertical surfaces. **DP600**



3M™ Scotch-Weld™ PUR Adhesives – Wood Bonders

Product (Color)	Key Features	Viscosity@ 250°F (121°C) (cp)	Approximate Open Time at 75°F (24°C)	Approximate Time to Handling Strength at 75°F (24°C)	Shore D	Elongation %	Size	UPC	Stock #
EZ250015 (Off-White)	Fast set time	7,000	1.5 minutes	15 seconds	65	750	1/10 gal. 5 gal.	00-051115-23545-0 00-051115-23546-7	7000046529 7010310232
EZ250060 (Off-White)	Medium set time	7,000	2 minutes	60 seconds	60	675	1/10 gal. 5 gal.	00-051115-23550-4 00-051115-23551-1	7000046531 7010329734
EZ250120 (Off-White)	Medium set time Low viscosity Thin bond lines	3,000	4 minutes	120 seconds	60	625	1/10 gal.	00-051115-23554-2	7000046532
TE015 (Off-White)	Fast set time	7,000	1.5 minutes	15 seconds	65	750	1/10 gal. 5 gal.	00-051115-25156-6 00-021200-39211-5	7000046472 7010367438
TE030 (Off-White)	Fast set time High viscosity	16,000	1 minute	30 seconds	60	725	1/10 gal. 5 gal. 55 gal. drum	00-051115-25157-3 00-021200-82484-5 00-021200-82483-8	7000046536 7010310236 7010367598
* TE100 (Off-White)	Medium set time Thin bond lines	7,000	2 minutes	60 seconds	61	675	1/10 gal. 5 gal.	00-051115-25161-0 00-021200-87244-0	7000028590 7010295326
TE200 (Off-White)	Medium set time Low viscosity Thin bond lines	3,000	4 minutes	120 seconds	60	625	1/10 gal. 2 kilo	00-051115-25164-1 00-048011-53272-1	7000000905 7000046540

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

* After Key Products, consider these.

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

3M™ Scotch-Weld™
PUR Easy 250
Applicator

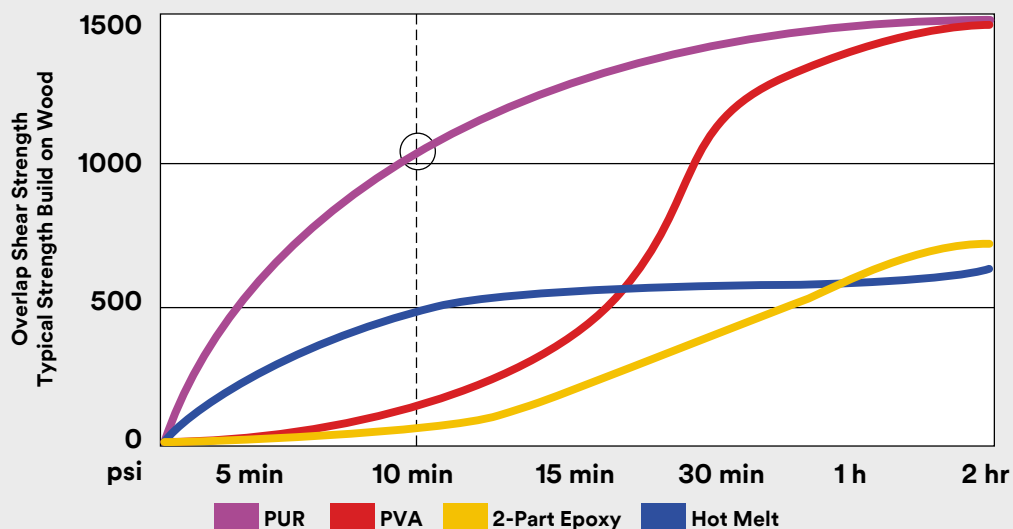


3M™ Scotch-Weld™
PUR Easy 250
Preheater



3M™ Scotch-Weld™ PUR Adhesives

PUR Adhesives enhance productivity with fast green strength. Shorter clamp times and reduced need for third-hand mechanical fasteners help speed up your production process without sacrificing ultimate strength.



3M™ Scotch-Weld™ PUR Adhesives – Plastic Bonders

Product (Color)	Key Features	Viscosity @ 250°F (12°C) (cP)	Approximate Open Time at 75°F/24°C	Approximate Time to Handling Strength at 75°F/24°C	Shore D	Elongation %	Size	UPC	Stock #
EZ250030 (Off White)	Fast set time, bonds a wide variety of plastics	13,000	2 minutes	30 seconds	50	725	1/10 gal. 5 gal.	00-051115-23541-2 00-051115-23542-9	7000046530 7000121357
EZ250150 (Off White)	Long open time, bonds plastics to metal, glass, wood	9,000	4 minutes	150 seconds	45	700	1/10 gal. 2 kilo 5 gal.	00-051115-23559-7 00-051115-23562-7 00-051115-23560-3	7000046533 7010295325 7010367590
EZ250200 (Off White)	Long open time, low viscosity, bonds plastics, wood, and many other material combinations	2,750	3 minutes	120 seconds	30	400	1/10 gal. 2 kilo	00-048011-57402-8 00-048011-57401-1	7000046538 7010367604
TE031 (Black)	Fast set time, bonds a wide variety of plastics	13,000	2 minutes	30 seconds	50	725	1/10 gal. 5 gal.	00-051115-25159-7 00-021200-89573-9	7000000903 7100031123
* TE031 (Off White)	Fast set time, bonds a wide variety of plastics	13,000	2 minutes	30 seconds	50	725	1/10 gal. 2 kilo 5 gal.	00-051115-25158-0 00-048011-53355-1 00-021200-83695-4	7000000902 7000028589 7100096731
TE040 (Black)	Fast set time, strong flexible bonds to plastic, wood, aluminum, glass	7,000	2 minutes	40 seconds	35	860	1/10 gal. 2 kilo 5 gal. 55 gal. drum	00-051115-64536-5 00-051115-64430-6 00-638060-14494-7 00-638060-14321-6	7100003450 7000136669 7100172685 7100160468
TE040 (Off White)	Fast set time, strong flexible bonds to plastic, wood, aluminum, glass	7,000	2 minutes	41 seconds	35	860	1/10 gal. 5 gal. 55 gal. drum	00-051115-25160-3 00-021200-25343-0 00-638060-14498-5	7000021292 7000136628 7100170133
TS115 HGS (Off White)	UV indicator Extrudable/sprayable/roll coatable with fast set time, bonds plastics to metal, glass, wood	16,000	10 minutes	60 seconds	47	600	5 gal.	00-051115-64535-8	7010310234
TS115 HGS (Off White)	Extrudable/sprayable/roll coatable with fast set time, bonds plastics to metal, glass, wood	16,000	10 minutes	60 seconds	47	600	1/10 gal. 5 gal. 55 gal. drum	00-051115-25163-4 00-021200-89451-0 00-021200-89452-7	7000000904 7010299377 7010367606
TS230 (Black)	Extrudable/sprayable, long open time, bonds plastics to metal, glass, wood	9,000	4 minutes	150 seconds	45	700	1/10 gal. 2 kilo 5 gal. 55 gal. drum	00-051115-25166-5 00-048011-53273-8 00-021200-89583-8 00-638060-14675-0	7000000906 7000046541 7000121361 7100179521
KEY PRODUCT TS230 (Off White)	Extrudable/sprayable long open time, bonds plastics to metal, glass, wood	9,000	4 minutes	150 seconds	45	700	1/10 gal. 2 kilo 5 gal. 55 gal. drum	00-051115-25165-8 00-048011-53271-4 00-021200-83640-4 00-021200-83639-8	7000000898 7000046534 7100024959 7100104259
TS230 (Gray)	Extrudable/sprayable long open time, bonds plastics to metal, glass, wood	9,000	4 minutes	150 seconds	45	700	55 gal. drum	00-638060-40191-0	7100191940
Purge Material 3756	Purge PUR adhesives from bulk dispensing equipment	8250	N/A	N/A	N/A	N/A	5 gal.	00-021200-56522-9	7000121333

3M™ Scotch-Weld™ PUR Applicator/Preheater/Hardware

Product	Description	UPC	Stock #
Applicator	PUR Easy 250 Applicator, pneumatically dispenses 1/10 gal. cartridges, US 120V	00-051115-23563-4	7000000958
Preheater	PUR Easy 250 Preheater, preheats up to four 1/10 gal. cartridges, 120V, Dual Temp	00-051115-23564-1	7000121608
System Accessories for hands-free dispensing	Applicator Bench Mount Bracket Assembly (bracket only) Hot Melt Applicator Foot Pedal Assembly 9277	00-021200-30086-8 00-021200-82278-0	7000121614 7000121596
Cartridge Nozzle	High Temperature Nozzles for PUR 1/10 gal. cartridges (Sample, 5/bag)		7000031234
Repair Kits and Replacement Parts	Adhesive Applicator Housing/Shroud Assembly Kit Applicator Nozzle Shroud Benchmount Quick Exhaust Assembly Replacement Kit Applicator Air Coupler Filter Kit Applicator Air Supply Line Kit Applicator Air Valve Kit Applicator Swivel Connector Applicator End Cap Applicator Heat Tube Assembly (120V) Kit Applicator Heat Tube (240V) Applicator On/Off Switch Kit Applicator Power Cord Kit (120V) Applicator Wire Stand High Temperature (250 Degrees F) PUR Preheater Thermostat/TCO Kit Low Temperature (170 Degrees F) PUR Preheater Thermostat/TCO Kit	00-051115-25783-4 00-048011-58320-4 00-021200-31357-8 00-021200-89475-6 00-021200-89479-4 00-048011-57410-3 00-048011-58298-6 00-021200-89476-3 00-021200-89486-2 00-021200-25303-4 00-021200-89482-4 00-021200-89481-7 00-021200-89483-1 00-051115-23619-8 00-051115-23618-1	7000028623 7000148288 7010366711 7000046665 7000046668 7000046652 7000046653 7000046666 7010329969 7000046673 7100079509 7010366708 7010329970 7010329954 7010366686

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

***** After Key Products, consider these.

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

3M™ Scotch-Weld™ PUR Applicator/Preheater/Hardware (cont.)

Product	Description	UPC	Stock #
Alternate Nozzle System not for use with disposable nozzles	Applicator Main Nozzle Assembly (includes nozzle, tip, tip cap and valve) Applicator Main Nozzle Applicator Extension Tip, .072 in orific Applicator Tip, .125 in orific Applicator Tip, .063 in orific Applicator Tip Cap Applicator Valve Assembly	00-021200-89514-2 00-021200-89515-9 00-021200-89471-8 00-021200-89473-2 00-021200-89472-5 00-021200-87194-8 00-021200-83730-2	7000027561 7000046672 7000046669 7000046671 7000046670 7100005819 7000046650

3M™ Scotch-Weld™ Instant Adhesives – Plastic and Rubber

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	UPC	Stock #
PR Gel (Clear)	Fast cure, gel viscosity for max gap fillin	Gel	-65° to 180°F (-54° to 82°C)	20-60 sec.	24	20 gram tube 300 gram cart	00-051115-25265-5 00-051115-25282-2	7100039255 7100039257
PR40 (Clear)	Low viscosity for close fittin plastic/rubber parts	40	-65° to 180°F (-54° to 82°C)	3-20 sec.	24	20 gram bottle	00-051115-25204-4	7010330469
PR100 (Clear)	General purpose, low viscosity plastic bonder	100	-65° to 180°F (-54° to 82°C)	10-20 sec.	24	20 gram bottle 500 gram bottle 500 gram bottle, 25/CV 2 kilo bottle	00-051115-25214-3 00-051115-25213-6 00-051115-25939-5 00-051111-07176-2	7100039259 7100039200 7010330473 7100135507
PR600 (Clear)	Medium viscosity with some gap filling for plastic/rubbers	600	-65° to 180°F (-54° to 82°C)	4-40 sec.	24	50 gram bottle 500 gram bottle	00-051115-25241-9 00-051115-25240-2	7100039244 7100039246
PR1500 (Clear)	General purpose, high viscosity for gap fillin	1,500	-65° to 180°F (-54° to 82°C)	20-60 sec.	24	20 gram bottle 500 gram bottle 500 gram bottle, 25/CV	00-051115-25222-8 00-051115-25221-1 00-076308-14147-9	7100039201 7100039203 7010366528

3M™ Scotch-Weld™ Instant Adhesives – Surface Insensitive

SI Gel (Clear)	Fast cure, gel viscosity for max gap fillin	Gel	-65° to 180°F (-54° to 82°C)	20-60 sec.	24	20 gram tube 300 gram cart.	00-051115-25266-2 00-051115-25284-6	7100039258 7010330472
SI100 (Clear)	Low viscosity for medium gaps	100	-65° to 180°F (-54° to 82°C)	3-20 sec.	24	3 gram tube 20 gram bottle	00-051115-25290-7 00-051115-25268-6	7100039241 7100039240
SI1500 (Clear)	High viscosity for gap fillin	1,500	-65° to 180°F (-54° to 82°C)	5-60 sec.	24	50 gram bottle 500 gram bottle	00-048011-61662-9 00-051115-25245-7	7010330477 7100039243

3M™ Scotch-Weld™ Instant Adhesives – Low Odor

LO1000 (Clear)	General purpose, high viscosity with reduced odor and blooming, suitable for minor gap fillin	1,000	-65° to 180°F (-54° to 82°C)	20-25 sec	24	20 gram bottle 500 gram bottle	00-051111-91664-3 00-048011-62738-0	7100039269 7100039250
----------------	---	-------	------------------------------	-----------	----	-----------------------------------	--	--------------------------

3M™ Scotch-Weld™ Low Odor and MMA Acrylic Adhesives

3M's Low Odor and MMA Acrylic Adhesives are designed for all of your sign application needs. They provide excellent impact strength, high peel strength and greatly extended shelf life compared to ordinary structural adhesives. With high structural strength, fast cure and environmental resistance, they are the first choice for the sign industry. DP8805NS, DP8810NS, DP8825NS, DP8405NS, DP8407NS, DP8410NS and DP8425NS



3M™ Scotch-Weld™ Instant Adhesives – Super Fast

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	UPC	Stock #
SF20 (Clear)	Fast cure Optimum performance on wide range of rubbers and plastics	20	-65° to 180°F (-54° to 82°C)	4-30 sec.	24	20 gram bottle 500 gram bottle	00-051111-91667-4 00-051115-25790-2	7100049744 7100039254
SF100 (Clear)	Fast cure, high strength with EPDM and other elastomers	100	-65° to 180°F (-54° to 82°C)	4-30 sec.	24	3 gram tube 20 gram bottle 500 gram bottle	00-048011-62630-7 00-048011-62631-4 00-048011-62629-1	7100039207 7100039206 7100039208

3M™ Scotch-Weld™ Instant Adhesives – Rubber Toughened

RT5000B (Black)	Rubber toughened for impact resistance High viscosity for minor gap fillin	5,000	-65° to 180°F (-54° to 82°C)	30 sec	24	20 gram bottle 500 gram bottle	00-051111-91665-0 00-051115-25200-6	7100039251 7100039252
-----------------	---	-------	------------------------------	--------	----	-----------------------------------	--	--------------------------

3M™ Scotch-Weld™ Instant Adhesives – Engineered Grade

CA4	Fast setting for a variety of plastics and rubbers	150	-65° to 180°F (-54° to 82°C)	5-40 sec.	24	2 gram tube 1 oz. bottle 1 lb. bottle	00-021200-96601-9 00-021200-96600-2 00-021200-96597-5	7010366320 7000028586 7000028587
CA5	Higher viscosity, slower setting version of CA4 for filling gap Meets CID A-A-3097, Type II, Class 3	2,000	-65° to 180°F (-54° to 82°C)	12-60 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-74289-7 00-021200-74288-0	7000046524 7010367474
CA7	Very fast setting Excellent metal bonder Better shock and impact resistance	15-40	-65° to 212°F (-54° to 100°C)	1-30 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-21061-7 00-021200-21062-4	7000121352 7000121353
CA8	Rapid setting Excellent adhesion to metals, plastics and rubbers Meets CID A-A-3097, Type II, Class 2	70-130	-65° to 180°F (-54° to 82°C)	5-40 sec.	24	2 gram tube 1 oz. bottle 1 lb. bottle	00-021200-21065-5 00-021200-21066-2 00-021200-21067-9	7000121354 7000046526 7000046527
CA9	Slower setting for parts alignment Useful for wire tracking and coil terminating Meets CID A-A3097, Type II, Class 3	1,000-1,700	-65° to 180°F (-54° to 82°C)	20-70 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-21068-6 00-021200-21069-3	7000046528 7010299373
CA40	Very fast setting Excellent adhesion to many substrates including flexible vinyl and EPDM rubber	20	-65° to 180°F (-54° to 82°C)	3-20 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-74290-3 00-021200-74291-0	7000000893 7000000894
CA40H	Higher viscosity version of CA40 Better void filling capabilities	400-600	-65° to 212°F (-54° to 100°C)	5-40 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-21073-0 00-021200-21074-7	7000000895 7000000896
CA50 Gel	High-viscosity, non-sag gel Less sensitive to acidic surfaces	45,000-85,000	-65° to 212°F (-54° to 100°C)	60-120 sec.	24	20 gram tube 200 gram cart.	00-021200-82332-9 00-021200-83737-1	7100002517 7000000899
CA100	High peel and impact strength High thermal shock and heat resistance	2,500-4,500	-65° to 212°F (-54° to 100°C)	20-70 sec.	24	1 oz. bottle 1 lb. bottle	00-021200-82334-3 00-021200-82335-0	7000000900 7000000901

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

*** After Key Products, consider these.**

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

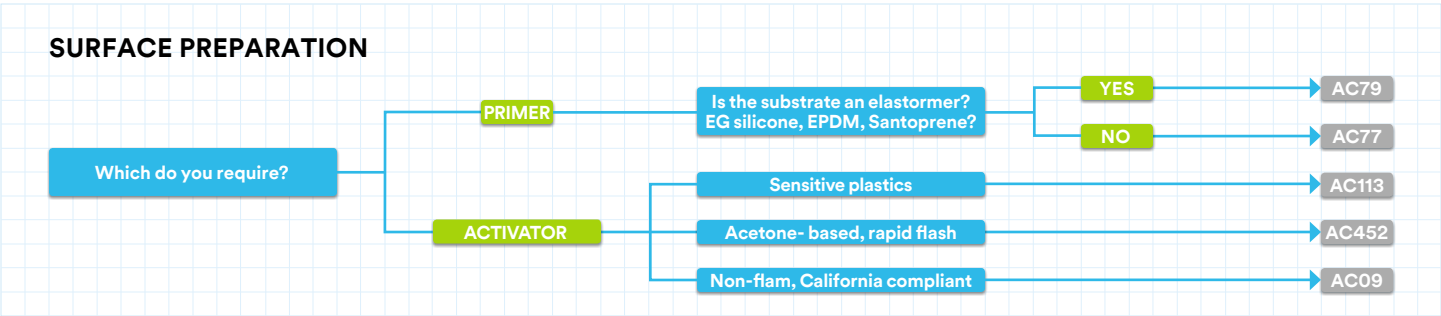
3M™ Scotch-Weld™ Instant Adhesive Primers & Activators

Product (Color)	Key Features	Typical Viscosity (cP)	Time to Handling	Full Cure (Hours)	Size	UPC	Stock #
AC09	Instant adhesive activator Non-flammable, solvent-based California compliant	1	1-5 sec.	24	2 fl. oz. bottle	00-051111-07795-5	7010366543
AC77	Instant adhesive primer for bonding of difficult-to-bond plastics such as polyethylene, polypropylene and polyacetal	<3	1-5 sec.	24	2 fl. oz. bottle 1 gallon can	00-048011-62728-1 00-638060-40067-8	7100039260 7100190206
AC79	Instant adhesive primer for bonding of difficult-to-bond elastomers such as silicone, fluoroelastomer and EPDM VOC compliant	2	1-5 sec.	24	2 fl. oz. bottle 8 fl. oz. bottle 4 liter can	00-051115-31388-2 00-051115-31389-9 00-051115-31390-5	7100039262 7100039264 7100039265
AC113	Instant adhesive general purpose accelerator Will not attack plastics	<3	1-5 sec.	24	8 fl. oz. bottle	00-048011-62682-6	7100079891
AC452	Instant adhesive acetone-based accelerator flashes off rapidly Excellent adhesion Overspray may attack some plastics	<2	1-5 sec.	24	8 fl. oz. bottle 4 liter can	00-048011-62686-4 00-048011-62689-5	7010295349 7010366542
Surface Activator	Clear, colorless organic-based liquid helps speed curing and prime surfaces Comes with brush and spray pump	<10	1-5 sec.	24	2 fl. oz. bottle	00-021200-87937-1	7000046525

For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category * After Key Products, consider these.

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



3M™ Scotch-Weld™ Engineered Grade Instant Adhesives

3M’s Engineered Grade Instant Adhesives combine high performance, excellent adhesion and temperature resistance with the speed of instant adhesives – providing you with differentiated capabilities for your most difficult thin bond line applications. CA5, CA40, CA40H, CA50 Gel



3M™ Scotch-Weld™ Plastic and Rubber Instant Adhesives

The PR (Plastic & Rubber) series of products bonds to most plastics and rubbers with a range of viscosities that will fit all your application needs. Just a single drop per square inch bonds several thousand pounds of holding power. They provide proven, world record strength with a hold of 8 metric tons. PR40, PR100, PR600, PR1500 and PRGel

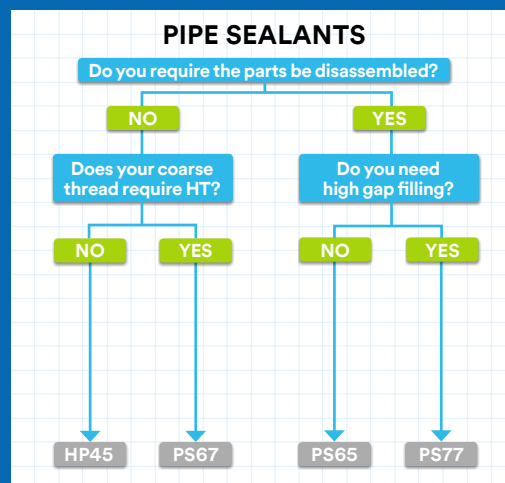
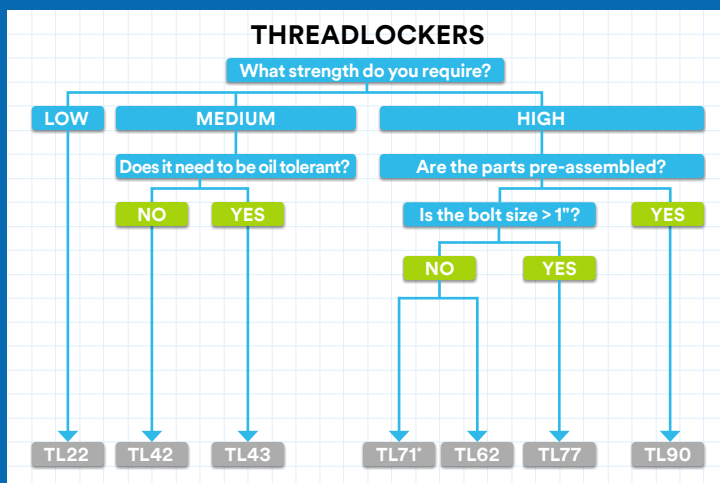


3M™ Scotch-Weld™ Anaerobic Adhesives – Threadlockers

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	UPC	Stock #
TL22 (Purple)	Screwlock - low removal torque fasteners less than a 1/4" (6mm)	1,200	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	10mL bottle 50mL bottle 250mL bottle	00-048011-62601-7 00-048011-62602-4 00-048011-62603-1	7100039217 7100039159 7010367446
TL42 (Blue)	Nutlock - medium strength, general purpose	1,200	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	1mL pipette 10mL bottle 50mL bottle 250mL bottle 1 liter bottle	00-048011-62604-8 00-048011-62605-5 00-048011-62606-2 00-048011-62607-9 00-051115-25124-5	7100064043 7100039190 7100039193 7100039192 7010310189
TL43 (Blue)	Oil tolerant, medium strength, general purpose	3,300	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	10mL bottle 50mL bottle 250mL bottle	00-051115-25138-2 00-051115-25139-9 00-051115-25140-5	7100039219 7100039222 7100039221
TL62 (Red)	Studlock - high strength with controlled torque tension	1,600	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	10mL bottle 50mL bottle 250mL bottle	00-048011-62609-3 00-048011-62610-9 00-048011-62611-6	7100039194 7100039196 7100039195
TL71 (Red)	Permanent studlock for bolts and studs up to 1" (25mm)	500	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	1mL pipette 10mL bottle 50mL bottle 250mL bottle	00-051115-25125-2 00-048011-62612-3 00-048011-62613-0 00-048011-62614-7	7010330204 7100039197 7100039231 7100039230
TL72 (Red)	High temperature studlock with gap filling for larger diameter coarse threaded parts	7,000	-65° to 450°F (-54° to 232°C)	< 30 minutes	24	50mL bottle	00-051115-25137-5	7100101211
TL77 (Red)	Heavy duty permanent for fasteners up to 1.5" (38mm) with coarse threads	7,000	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	50mL bottle 250mL bottle	00-051115-25143-6 00-051115-25144-3	7100039225 7100039224
TL90 (Green)	Penetrating adhesive for pre-assembled fasteners and porosity sealing of welds	20	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	10mL bottle 50mL bottle 250mL bottle	00-048011-62615-4 00-048011-62616-1 00-048011-62617-8	7100039234 7100039236 7100039235

3M™ Scotch-Weld™ Anaerobic Adhesives – Pipe Sealants

HP45 (Purple)	High pressure sealant for all hydraulic and pneumatic fitting	14,000	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	50mL bottle 250mL bottle	00-048011-62721-2 00-048011-62722-9	7100039213 7100039212
PS65 (White)	General purpose for applications requiring easy disassembly	Paste	-65° to 300°F (-54° to 149°C)	2-5 hours	24	50mL tube 250mL tube	00-048011-62711-3 00-048011-62712-0	7100039238 7100039237
PS67 (White)	Fast curing pipe sealant for inactive surfaces such as stainless steel	Paste	-65° to 400°F (-54° to 204°C)	15-30 mins	24	50mL tube 250mL tube	00-048011-62714-4 00-048011-62715-1	7100039216 7100039215
PS77 (Yellow)	Fast curing pipe sealant with medium-high viscosity	18,000	-65° to 400°F (-54° to 204°C)	15-30 mins	24	50mL tube	00-054007-99635-4	7010366168



*For permanent attachment.

3M™ Scotch-Weld™ Anaerobic Adhesives – Retaining Compounds

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	UPC	Stock #
RT09 (Green)	For tight tolerances and press fit augmentation	125	-65° to 300°F (-54° to 149°C)	10-30 mins	24	10mL bottle 50mL bottle 250mL bottle	00-048011-62661-1 00-048011-62662-8 00-048011-62663-5	7100039228 7100039209 7010367430
RT38 (Green)	Fast setting, high strength for bearings, bushings or sleeves on shafts or in housings	2,500	-65° to 300°F (-54° to 149°C)	10-15 mins	24	250mL bottle	00-051115-81284-2	7010367436
RT48	Medium viscosity, high strength, fast curing formulation	600	-65° to 300°F (-54° to 149°C)	15-20 mins	24	50mL bottle 250mL bottle	00-054007-99632-3 00-054007-99633-0	7010367443 7100170130

3M™ Scotch-Weld™ Anaerobic Adhesives – Gasket Makers

GM10 (Red)	Masking or dressing gaskets in rigid assemblies Can be screen printed High temperature resistance	Paste	-65° to 400°F (-54° to 204°C)	< 30 minutes	24	50mL tube	00-048011-62652-9	7100039210
GM18 (Red)	Instant flexible seal without a primer on mating aluminum flange	Paste	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	300 gram cart. 50mL tube	00-048011-62660-4 00-048011-62658-1	7010367433 7100039211
GM74 (Orange)	Form-in-place gasketing product designed for multi-purpose applications on rigid metal flanges and surface	Paste	-65° to 300°F (-54° to 149°C)	< 30 minutes	24	50mL bottle, 10/CV	00-054007-99634-7	7010330193

3M™ Scotch-Weld™ Anaerobic Adhesives – Activators

AC649 (Green)	Acetone-based green primer for inactive or very cold surfaces 30-day part life for pre-application California compliant	<3	N/A	<5 minutes	24	2 fl. oz. bottle 8 fl. oz. bottle	00-048011-62708-3 00-048011-62709-0	7100075275 7010367620
------------------	---	----	-----	------------	----	--------------------------------------	--	--------------------------

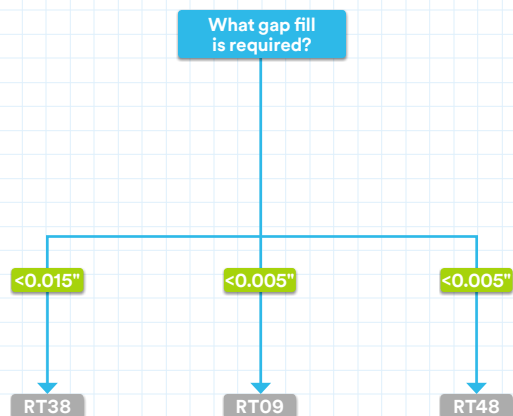
For lead times on bulk adhesives, please contact your 3M representative.

KEY PRODUCT Denotes product to consider first in this category

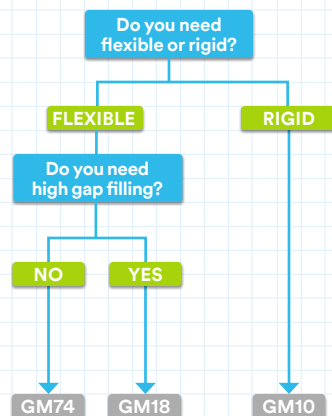
*** After Key Products, consider these.**

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

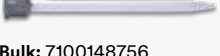
RETAINING COMPOUNDS



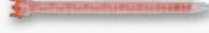
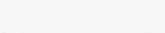
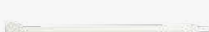
GASKET MAKERS



3M™ EPX™ Applicators and Nozzles

		Replacement Plunger Orders							Nozzle Length (Inches)		Static Mixing Nozzle Options	
		43 mL (2:3)	45 mL (10:1)	48.5 mL (1:1)	50 mL (2:1)	200 mL (2:1 & 1:1)	400 mL (2:1 & 1:1)					
3M™ Scotch-Weld™ EPX™ Plus II Applicator* Stock #: 7100148764 UPC: 00-063806-01001-7 	1:1/2:1 Shared Plunger Stock #: 7010415317 UPC: 00-063806-01000-0		✓	✓				3.6	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Green, 48.5mL/50mL Stock #: 7100104991 UPC: 0-00-76308-86434-7		Bulk: 7100148765 Bulk: 0-00-63806-01003-1	
			✓	✓				6.2	3M™ EPX™ Mixing Nozzle Helical White, 48.5mL/50mL Stock #: 7100148766 UPC: 00-063806-01004-8		Bulk: 7100148756 Bulk: 00-063806-01005-5	
	2:1 Plunger Used only for 2216 epoxy Stock #: 7010309947 UPC: 0-00-76308-86390-6	✓						3.3	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 43mL Stock #: 7000000952 UPC: 0-00-21200-50008-4		Bulk: 7000121587 Bulk: 0-00-21200-50009-1	
								5.8	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 43mL Stock #: 7100034271 UPC: 0-00-51115-81449-0		Bulk: 7100034272 Bulk: 0-00-51115-81467-9	
	10:1 Plunger Stock #: 7010329933 UPC: 0-00-76308-86391-3		✓					3.6	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Orange, 45mL Stock #: 7100007806 UPC: 0-00-51115-69043-3			
*Includes 1:1, 2:1 and 10:1 plunger.												
3M™ EPX™ Metal Applicator Stock #: 7000000954 UPC: 0-00-21200-21789-0 	2:1 Plunger Stock #: 7000000956 UPC: 0-00-21200-82314-5	✓						3.3	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 43mL Stock #: 7000000952 UPC: 0-00-21200-50008-4		Bulk: 7000121587 Bulk: 0-00-21200-50009-1	
								5.8	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 43mL Stock #: 7100034271 UPC: 0-00-51115-81449-5		Bulk: 7100034272 Bulk: 0-00-51115-81467-9	
				✓				3.6	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Green, 43mL/48.5mL Stock #: 7100104991 UPC: 0-00-76308-86434-7		Bulk: 7100148765 Bulk: 0-00-63806-01003-1	
				✓				6.2	3M™ EPX™ Mixing Nozzle Helical White, 48.5mL/50mL Stock #: 7100148766 UPC: 00-063806-01004-8		Bulk: 7100148756 Bulk: 00-063806-01005-5	
3M™ EPX™ Pneumatic Applicator 48.5/50 mL Stock #: 7100148769 UPC: 00-063806-01006-2 	N/A		✓	✓				3.6	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Green, 43mL/48.5mL Stock #: 7100104991 UPC: 0-00-76308-86434-7		Bulk: 7100148765 Bulk: 0-00-63806-01003-1	
				✓	✓			6.2	3M™ EPX™ Mixing Nozzle Helical White, 48.5mL/50mL Stock #: 7100148766 UPC: 00-063806-01004-8		Bulk: 7100148756 Bulk: 00-063806-01005-5	
3M™ Scotch-Weld™ EPX™ Manual Applicator 200 mL Stock #: 7000046632 UPC: 0-00-21200-87977-7 	1:1/2:1 Shared Plunger Stock #: 7000121583 UPC: 0-00-21200-87981-4					✓	✓	5.0	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 200mL and 400mL Stock #: 7000028616 UPC: 0-00-21200-97331-4			
									7.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 200mL and 400mL Stock #: 7000046633 UPC: 0-00-21200-87982-1		

3M™ EPX™ Applicators and Nozzles

		Replacement Plunger Orders	37 mL (2:1) & 43 mL (2:3)	45 mL (10:1)	50 mL (1:1)	200 mL (2:1 & 1:1)	400 mL (2:1 & 1:1)	Nozzle Length (Inches)	Static Mixing Nozzle Options
3M™ EPX™ 200, 400 mL Manual Applicator Stock #: 7000046634 UPC: 0-00-51111-98073-6		N/A						5.0	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 200mL and 400mL Stock #: 7000028616 UPC: 0-00-21200-97331-4 
								7.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 200mL and 400mL Stock #: 7000046633 UPC: 0-00-21200-87982-1 
3M™ EPX™ 490 mL Manual Applicator Stock #: 7100015958 UPC: 0-00-51115-71115-2		N/A						9.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical Orange, 490mL Stock #: 7100015959 UPC: 0-00-51115-69042-6 
								4.4	3M™ Scotch-Weld™ EPX™ Mixing Nozzle, Low Waste Square Green, 490mL Stock #: 7100066351 UPC: 0-00-51115-81619-2 
3M™ Scotch-Weld™ EPX™ Pneumatic Applicator 200 mL Stock #: 7000121584 UPC: 0-00-21200-87978-4		N/A						5.0	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 200mL and 400mL Stock #: 7000028616 UPC: 0-00-21200-97331-4 
								7.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 200mL and 400mL Stock #: 7000046633 UPC: 0-00-21200-87982-1 
3M™ EPX™ 400 mL Pneumatic Applicator Stock #: 7000148285 UPC: 0-00-21200-87979-1		N/A						5.0	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Square Gold, 200mL and 400mL Stock #: 7000028616 UPC: 0-00-21200-97331-4 
								7.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical White, 200mL and 400mL Stock #: 7000046633 UPC: 0-00-21200-87982-1 
3M™ EPX™ 490 mL Pneumatic Applicator Stock #: 7100011053 UPC: 0-00-51115-69041-9		N/A						9.5	3M™ Scotch-Weld™ EPX™ Mixing Nozzle Helical Orange, 490 mL Stock #: 7100015959 UPC: 0-00-51115-69042-6 
								4.4	3M™ Scotch-Weld™ EPX™ Mixing Nozzle, Low Waste Square Green, 490 mL Stock #: 7100066351 UPC: 0-00-51115-81619-2 
Standard Caulk Gun		N/A		3M™ Concrete Repair Urethane 8.4 oz cartridges				5.5	3M™ Concrete Repair 8.4 oz Cartridge Nozzles Stock #: 7000046642 UPC: 0-00-48011-53382-7 

For low volume applications and take-it-to-the-job convenience, the 3M™ EPX™ Plus II and EPX™ metal manual applicators comfortably dispense any of the 3M™ Scotch-Weld™ Duo-Pak Structural Adhesives. For higher volume applications, select the 200mL manual dispenser, or the 200mL or 400mL pneumatic dispenser. For concrete repair, there are both manual or pneumatic options.

3M™ Scotch-Weld™ One-Part Heat Cured Epoxies require a unique manual or pneumatic dispenser, such as Semco® 250, 350, 850, 950, or equivalent.

Click these links to see how 3M™ Scotch-Weld™ Structural Adhesives show unbelievable feats of strength and how our customers solved their challenges. We Help You Make It. Better.

Surface Preparation Tips

The following surface preparation steps are generally recommended for most substrates and structural adhesives. See Technical Data Sheets for more specific recommendations.

METALS

1. Safely wipe surface with acetone or methyl ethyl ketone (MEK) using a clean cloth. A heavier degreaser may be needed if the substrate contains a layer of processing oil.
2. Lightly abrade surface with sandblasting, fine grit sandpaper or 3M™ Scotch-Brite™ 7447 maroon pads.
3. Wipe surface with acetone or MEK to remove debris.
4. Allow surface to dry before applying adhesive.

PLASTICS AND RUBBERS

1. Lightly abrade surface with sandblasting, fine grit sandpaper or 3M™ Scotch-Brite™ 7447 maroon pads.
2. Wipe surface with isopropyl (IPA) alcohol using a clean cloth to remove debris.
3. Allow solvent to evaporate before applying adhesive.

GLASS

1. Wipe surface using a clean cloth with solvent containing 0.5 wt% silane adhesion promoter or wipe with 3M™ Scotch-Weld™ Metal Primer 3901.
2. Allow solvent to evaporate before applying adhesive.



Industrial Adhesives & Tapes Division

3M Center
Building 225-3S-06
St. Paul, MN 55144-1000
1-800-362-3550
www.3M.com/structuraladhesives

3M, Scotch-Weld, EPX and Scotch Brite are trademarks of 3M Company. SEMCO® is a registered trademark of SEMCO, LLC.
Please recycle. Printed in USA.
© 2019 3M. All rights reserved.
78-9236-7114-9 Dec 2018

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information. **Product Selection and Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property. **Warranty, Limited Remedy, and Disclaimer:** Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. **3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.** If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.