

**3M** Science.  
Applied to Life.™



**Scotch-Weld**™  
Structural Adhesive

## Product Selection Guide

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

EMEA September 2022

# We Help You Make It. Better.

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.

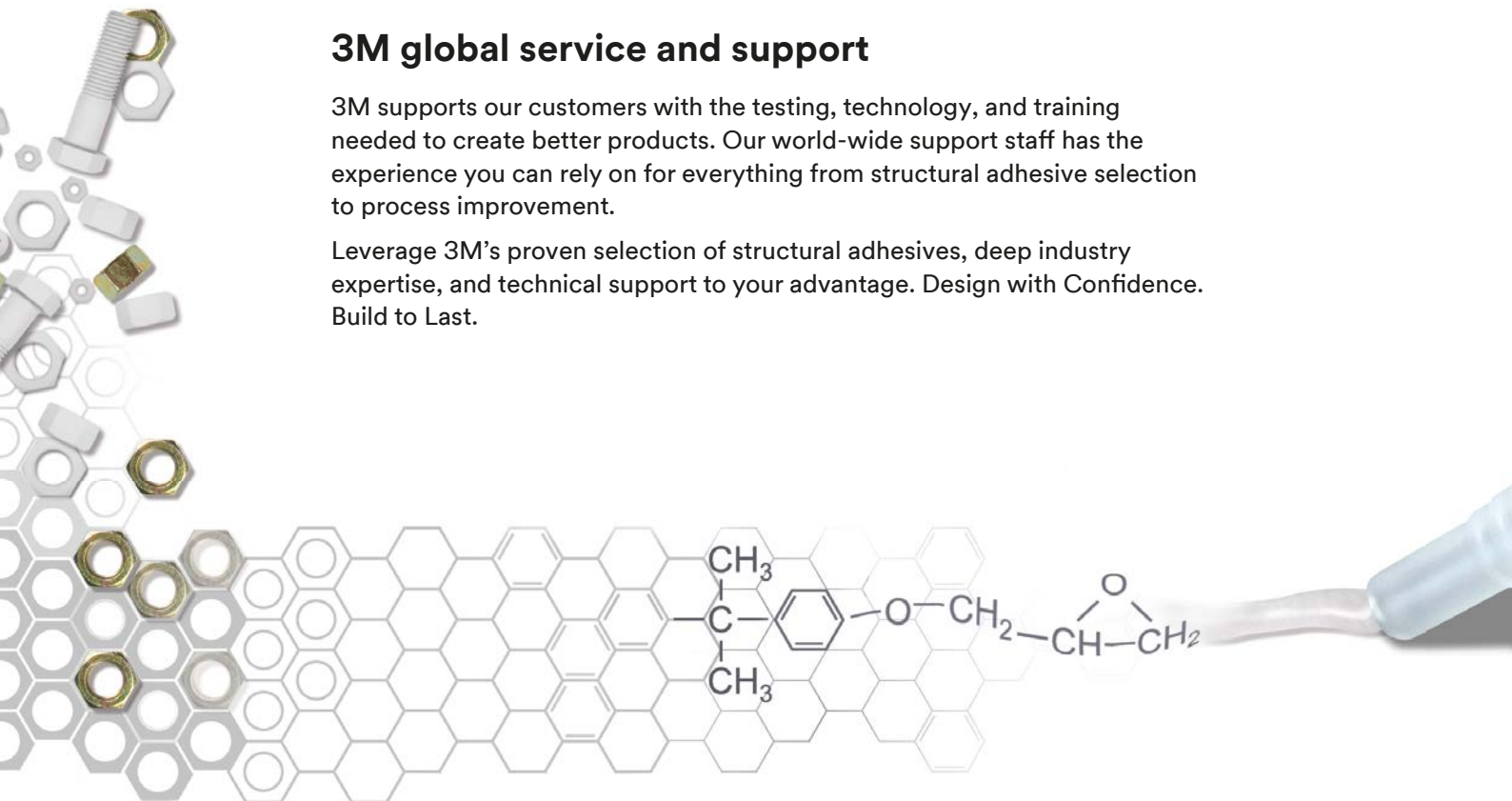
## Trusted innovations from aerospace to office space

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.



## 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.



### Design Solutions

**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.



### Process Efficiencies

**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.



### Performance Optimization

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

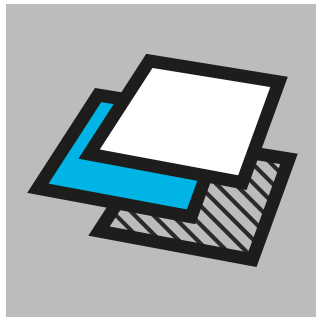
**Increased Durability:** Resist chemicals, environment, galvanic corrosion, fatigue, and material separation along edges or corners.

# Simplifying Adhesive Decisions for Your Application

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

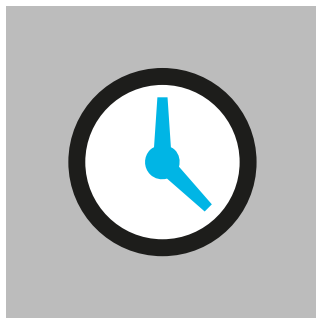
## Q: *What materials will be bonded?*

**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.



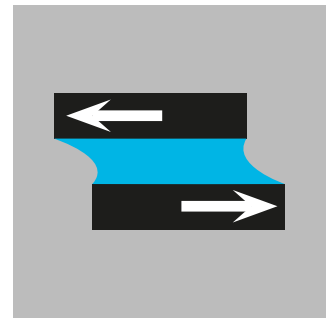
## Q: *What surface preparation will be required?*

**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.



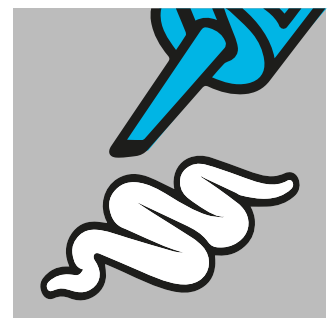
## Q: *What types of joints are best for structural adhesives?*

**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 125  $\mu$  to 500  $\mu$ . The adhesive qualification process should always include testing of prototype assemblies to ensure the adhesive will provide enough performance.



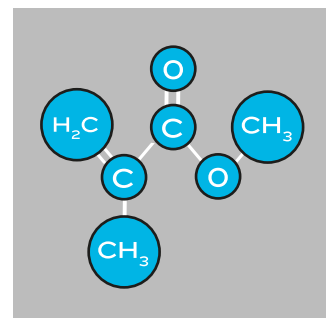
## Q: *How are structural adhesives used and applied?*

**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 7 MPa 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.

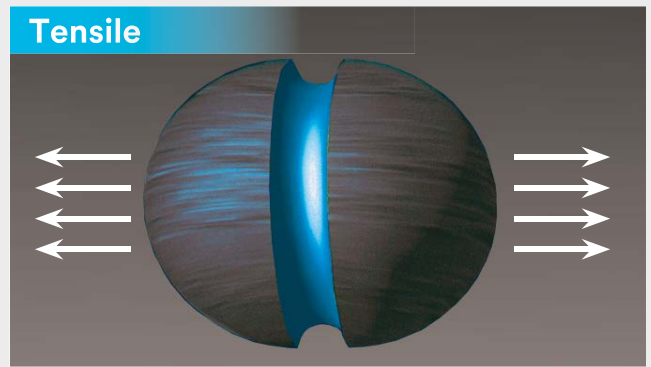
- **Acrylic adhesives** are two-part adhesives that provide excellent bond strength and durability, although slightly lower than epoxy adhesives. However, they have several features that make them easier to use in many applications and manufacturing processes. These benefits include a much faster cure 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.

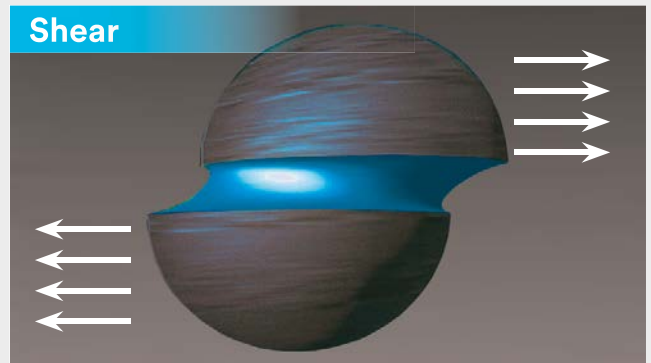
- **Cyanoacrylate adhesives** (instant adhesives) are one-component, lower viscosity liquids that cure extremely quickly with just contact pressure and surface moisture. They adhere well, with thin bond lines, to plastics, metals and rubbers. With the use of primers, they can also adhere to low surface 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.

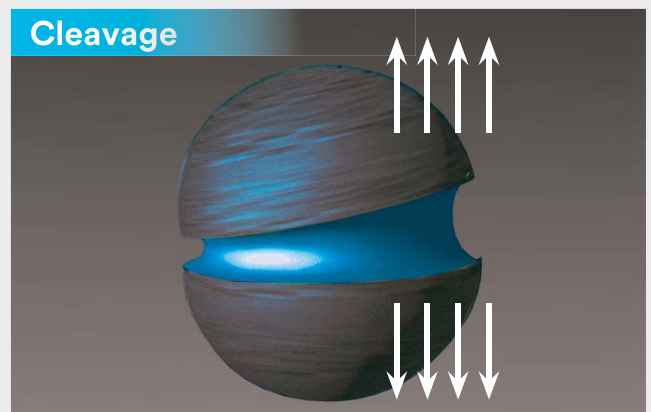
- **PUR adhesives** (Polyurethane-reactive adhesives) are one-part adhesives that apply like a hot melt, but cure with ambient moisture for near structural strength bonds. Fast set times and build strength over the next 24-48 hours can reach as much as 7 MPa in overlap shear strength. They are flexible 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).



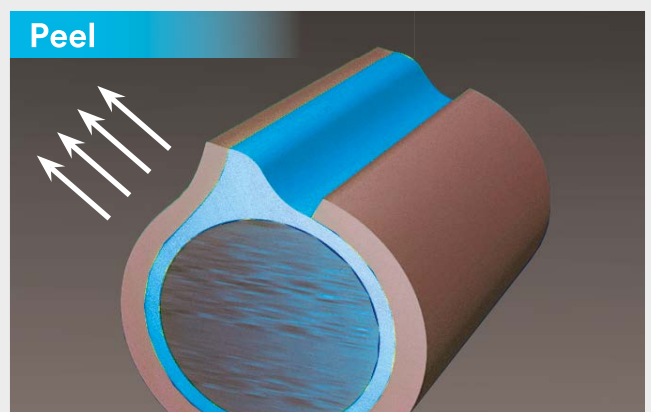
**Tensile** is pull exerted equally over the entire joint. Pull direction is straight and away from the adhesive bond.



**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, DP8710NS, DP620NS, PR100, TS230

### Specialty Vehicle

#### Key Features & Benefits:

- Weight reduction
- High strength
- Vibration & fatigue resistance

#### Key Products:

DP6330NS, DP8410NS, DP8610NS, 7240, 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:

DP8705NS, 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, 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:**

DP270, DP8705NS, DP8910NS, 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, DP8710NS, TS230, TL42



## Aerospace

### **Key Features & Benefits:**

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

### **Key Products:**

2216, DP100FR, TL71



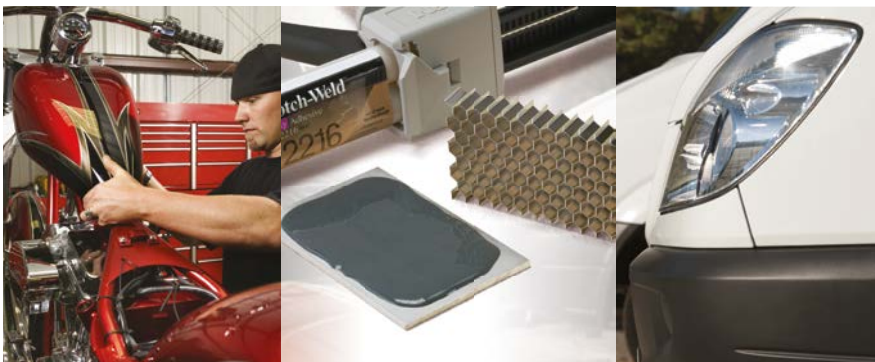
## Plastic, Composite & Rubber

### **Key Features & Benefits:**

- Bonding of low surface energy plastics
- Impact resistant composite bonding

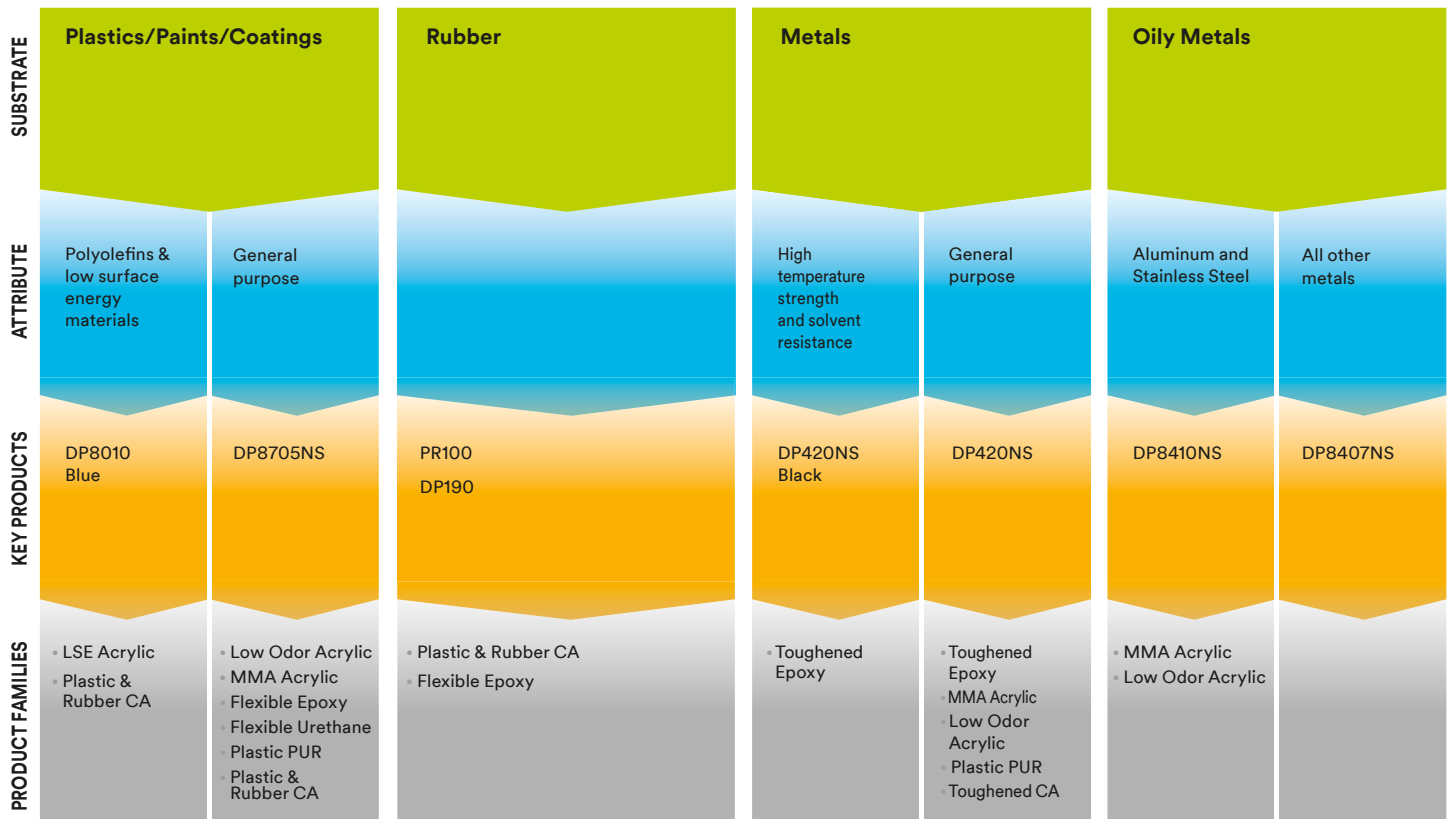
### **Key Products:**

DP8010 Blue, DP190, DP6310NS, 2216, TS230, PR100, DP490



# 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 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.

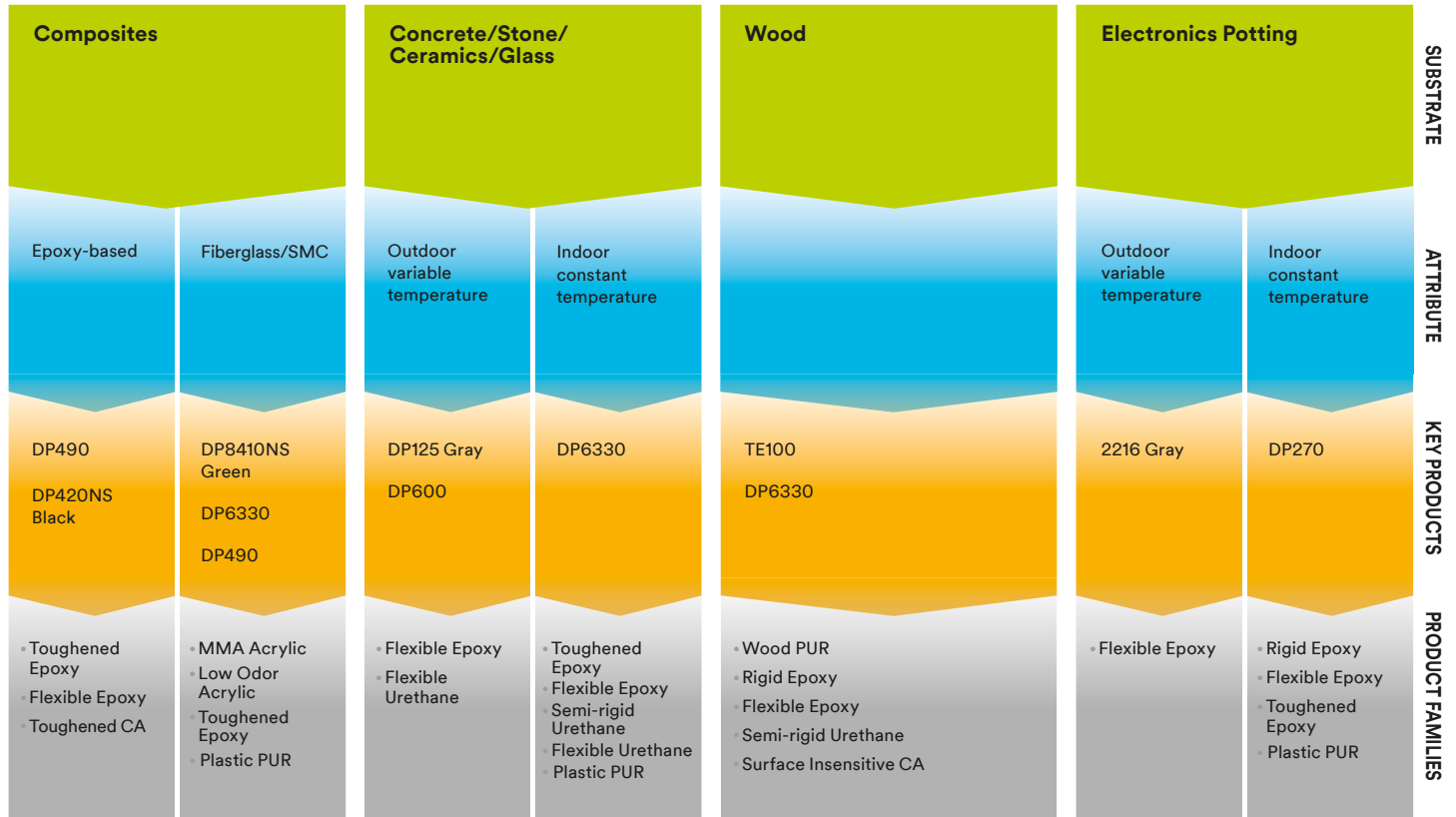
**LSE Acrylic Adhesives** — Outstanding adhesion to polyolefin materials such as polypropylene, polyethylene and TPO without surface treatment.

**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.



**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**

**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.

**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.

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

**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.

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

# 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	LSE Acrylic	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 Epoxy Toughened Epoxy Plastic PUR	Semi-rigid Urethane MMA Acrylic Flexible Epoxy Toughened Epoxy Plastic PUR	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 2214 Toughened Epoxy	2214	2214	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	2214 Toughened Epoxy	LO Acrylic MMA Acrylic	DP8407NS 2214	Semi-rigid Urethane MMA Acrylic LO Acrylic Toughened Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy MMA Acrylic LO Acrylic Plastic PUR	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	2214 Toughened Epoxy	2214 Toughened Epoxy	Toughened Epoxy Flexible Epoxy 2214 DP810	DP8407NS 2214	DP8407NS 2214	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy 2214 Plastic PUR	Toughened Epoxy 2214	Flexible Epoxy	Plastic PUR Toughened Epoxy
Oily Metals	Stainless Steel & Aluminum	LSE Acrylic	LO Acrylic MMA Acrylic	N/A	2214	LO Acrylic MMA Acrylic	DP8407NS 2214	LO Acrylic MMA Acrylic	DP8407NS	MMA Acrylic LO Acrylic	MMA Acrylic LO Acrylic 2214	N/A	N/A	N/A
	Other Metals	LSE Acrylic	DP8407NS	N/A	2214	DP8407NS 2214	DP8407NS 2214	DP8407NS	DP8407NS 2214	DP8407NS	2214	N/A	N/A	N/A
Composites	Fiberglass/SMC	LSE Acrylic	Semi-rigid Urethane MMA Acrylic LO Acrylic Flexible Epoxy Urethane Plastic PUR	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane MMA Acrylic LO Acrylic Toughened Epoxy Plastic PUR	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	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	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	Semi-rigid Urethane MMA Acrylic Flexible Epoxy Toughened Epoxy Plastic PUR	Plastic & Rubber CA* Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	Semi-rigid Urethane Toughened Epoxy MMA Acrylic LO Acrylic Plastic PUR	Toughened Epoxy Flexible Epoxy 2214 Plastic PUR	MMA Acrylic LO Acrylic 2214	2214	Semi-rigid Urethane Toughened Epoxy Flexible Epoxy Plastic PUR	Toughened Epoxy Flexible Epoxy Plastic PUR	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 2214	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 Flexible 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* mm	m per 45 mL (10:1 Cart.)	m per 48,5 - 50 mL (1:1 & 2:1 Cart.)	m per 400 mL (1:1 & 2:1 Cart.)	m per 490 mL (10:1 Cart.)
12.7 mm	0.7m	0.8 m	6 m	8 m
9.5 mm	1 m	1 m	11 m	14 m
6.4 mm	3 m	3 m	25 m	31 m
3.2 mm	11 m	13 m	101 m	123 m
1.6 mm	45 m	50 m	400 m	488 m

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

Wet Thickness mm	m <sup>2</sup> /liter	liter/1,000 m <sup>2</sup>
0.8 mm	1 m <sup>2</sup>	794 liter
0.64 mm	1.5 m <sup>2</sup>	635 liter
0.13 mm	8 m <sup>2</sup>	127 liter

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

Bead Size Dimension* mm	Approx. m/liter	Approx. liter/1,000m
12.7 mm	16 m	63 liter
9.5 mm	28 m	36 liter
6.4 mm	63 m	16 liter
3.2 mm	252 m	4 liter
1.6 mm	1,000 m	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.

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

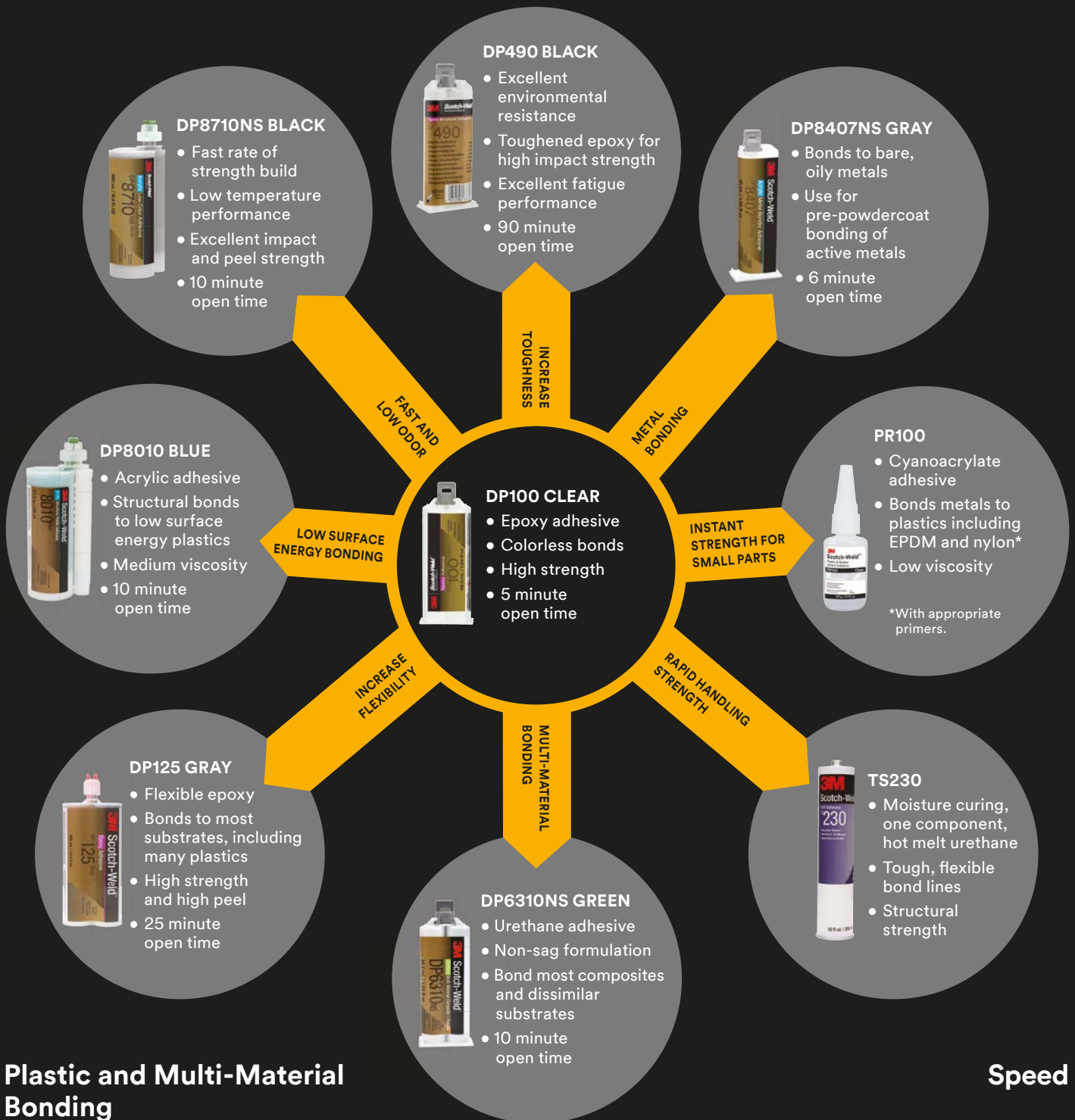
3M's Low Odor and MMA Acrylic Adhesives are designed for all of your sign application needs. They provide excellent impact strength, high peel strength and greatly extended shelf life compared to ordinary structural adhesives. With high structural strength, fast cure and environmental resistance, they are the first choice for the sign industry. **DP8705NS, DP8710NS, DP8725NS, DP8405NS, DP8407NS, DP8410NS, DP8425NS, DP8610NS and DP8625NS**





# Go-to products for Structural Bonding





## High Strength and Metal Bonding



**Plastic and Multi-Material Bonding**

**Speed**

# 3M™ Scotch-Weld™ Rigid Epoxies

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-55°C	24°C	82°C			
KEY PRODUCT DP100 100 (Clear) 	General purpose Rigid bonds UL 94 HB rating	1:1	13,000	5 minutes	20 minutes	4	6	10	2	48.5mL 200mL 5 gal. pail A 5 gal. pail B	7100200484 7100075490 7100086557 7100086558	*
KEY PRODUCT DP100FR 100FR (Off-White) 	Flame retardant UL94 V-0 rating	1:1	80,000	6 minutes	20 minutes	4	9	15	6	48.5mL 5 gal. pail A 5 gal. pail B	7100148760 7010366158 7010366123	*
KEY PRODUCT DP100NS 100NS (Translucent)	General purpose Non-sag	1:1	95,000	5 minutes	20 minutes	4	6	10	2	48.5mL 200mL 400mL 5 gal. pail A 5 gal. pail B	7100148744 7100014024 7100082554 7010367412 7010295308	
KEY PRODUCT DP270 270 (Black) 	Rigid potting compound Non-corrosive UL 94 HB rating	1:1	12,000	60 minutes	3 hours	4	8	17	2	48.5mL 400mL Gallon kit 5 gal. pail A 5 gal. pail B	7100200491 7100082565 7000121253 7000046463 7000046439	* * * *
KEY PRODUCT DP270 270 (Clear) 	Rigid potting compound Non-corrosive UL 94 HB rating	1:1	12,000	60 minutes	3 hours	4	8	17	2	48.5mL 5 gal. pail A 5 gal. pail B	7100200493 7000028575 7000028567	*
KEY PRODUCT 1838 B/A (Green)	Multi-purpose Rigid bonds	4:5	400,000	60 minutes	8 hours	7	10	21	3	2 oz. tube kit Quart kit 5 gal. pail A 5 gal. pail B	7000000810 7000046340 7010309728 7010367213	*
KEY PRODUCT 3520 B/A (Translucent)	Tough durable bonds	1:1	12,000	230 minutes	8 hours	7	27	35	5	300mL kit 2 L kit 10 L kit	7100183880 7100185158 7100183879	* * *

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





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

**KEY PRODUCT** Denotes product to consider first in this category

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

\* These products are in stock

# 3M™ Scotch-Weld™ Flexible Epoxies

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-55°C	24°C	82°C			
* DP100 Plus 100 Plus (Clear) 	Very flexible Colorless UL 94 HB rating	1:1	8,500	4 minutes	20 minute	98	21	24	1	48.5mL 200mL 5 gal. pail A 5 gal. pail B	7100148750 7100069498 7100046020 7100084539	*
DP105 105 (Clear) 	Very flexible Colorless	1:1	6,500	5 minutes	20 minute	89	24	14	1	48.5mL 5 gal. pail A 5 gal. pail B	7100200485 7000000856 7000000850	*
DP110 110 (Gray)	General purpose Flexible bonds	1:1	55,000	8 minutes	20 minute	71	19	24	2	48.5mL 5 gal. pail A 5 gal. pail B	7100200487 7010299362 7010299357	*
DP110 110 (Translucent)	General purpose Flexible bonds	1:1	50,000	8 minutes	20 minute	71	17	17	1	48.5mL 400mL 5 gal. pail A 5 gal. pail B	7100200486 7000079998 7010366163 7010366143	* *
KEY PRODUCT DP125 125 (Gray) 	High performance Very flexible bonds UL 94 HB rating	1:1	52,500	25 minutes	2.5 hours	160	23	30	3	48.5mL 400mL 5 gal. pail A 5 gal. pail B	7100200488 7100076727 7100084588 7100084538	* *
* DP190 (Gray) 	High performance Slightly flexible bonds UL 94 HB rating	1:1	80,000	90 minutes	10 hours	89	10	17	3	48.5mL 400mL 10 Liter Kit 18 Liter Part A 18 Liter Part B	7100200489 7100200490 7000080020 7100269977 7100269976	* * * * *
* 2216 B/A (Gray)	High performance Very flexible bonds	2:3	80,000	90 minutes	10 hours	89	21	22	3	41.5mL Duo-Pak 135 ml 250 ml 1.6 Liter Kit Pint kit 5 gal. pail A 5 gal. pail B	7100262036 7100141716 7100141986 7100141727 7000046358 7000046361 7000046360	* * * * * * *
2216 B/A (Translucent)	General purpose Very flexible bonds	1:1	10,000	2 hours	14 hours	125	21	12	1	2 oz. tube kit Quart kit Gallon kit 5 gal. pail A 5 gal. pail B	7000046479 7000000861 7000046480 7000046494 7000121307	
7838 B/A (Tan)	General purpose Flexible bonds	1:1	160,000	180 minutes	12 hours	27	18	23	6	2 kg kit	7100185187	*

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# 3M™ Scotch-Weld™ Toughened Epoxies

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-55°C	24°C	82°C			
DP410 (Off-White)	Tough durable bonds High impact resistance	2:1	70,000	12 minutes	80 minutes	96	28	38	8	50mL	7100261739	★
										400mL	7100261679	★
										20 Liter pail A	7100055705	★
										20 Liter pail B	7100261678	★
DP410 (Black)	Tough durable bonds High impact resistance	2:1	70,000	12 minutes	80 minutes	96	28	38	8	20 Liter pail A	7100055704	★
										20 Liter pail B	7100261678	★
* KEY PRODUCT	Tough durable bonds High impact resistance	2:1	30,000	20 minutes	2 hours	50	31	31	9	50mL	7100148731	★
										200mL	7100007956	
										400mL	7100077148	★
										Gallon Kit	7000046381	
										5 gal. pail A	7000000834	
										5 gal. pail B	7000000827	
										55 gal. drum A	7010365967	
55 gal. drum B	7010309750											
* KEY PRODUCT	Tough durable bonds High impact resistance UL 94 HB rating	2:1	30,000	20 minutes	2 hours	125	31	31	9	50mL	7100148736	★
										200mL	7100077136	
										400mL	7100002516	
										5 gal. pail A	7100001144	
										5 gal. pail B	7100001145	
* KEY PRODUCT	Tough durable bonds Non-sag UL 94 HB rating	2:1	180,000	20 minutes	2 hours	107	31	31	9	50mL	7100148758	★
										400mL	7100010680	★
										5 gal. pail A	7000000857	
										5 gal. pail B	7000000853	
										43 gal. drum A	7100084536	
										43 gal. drum B	7100084537	
* KEY PRODUCT	Tough durable bonds UL 94 HB rating	2:1	30,000	60 minutes	4 hours	142	31	31	5	50mL	7100200496	★
										400mL	7100200498	★
										20 Liter pail A	7100269980	★
										20 Liter pail B	7100270164	★
										55 gal. drum A	7010366165	
55 gal. drum B	7100153215											
* KEY PRODUCT	Tough durable bonds	2:1	90,000	90 minutes	4 hours	60	25	31	14	50mL	7100200499	★
										400mL	7100200501	★
										20 Liter Part A	7100269979	★
										20 Liter Part B	7100269978	★
* KEY PRODUCT	Tough durable bonds Non-sag Resistance to high temperatures	2:1	200,000	60 minutes	6 hours	150	20	30	24	50mL	7100200504	★
										400mL	7100200506	★
										20 Liter Part A	7100270163	★
										20 Liter Part B	7100269955	★
* KEY PRODUCT	Tough durable bonds	2:1	120,000	45 Min	6 hours	92	18	27	12	400mL	7100042087	★
										54 Liter Kit	7100042123	★
										200 Liter Part A	7100217241	★
										200 Liter Part B	7100217165	★
* KEY PRODUCT	Tough durable bonds with high shear and peel strength	2:1	280,000	100 minutes	7 hours	48	24	33	10	400mL	7000033763	★
			700,000	400 minutes	18 hours					400mL	7000080008	★
			700,000	100 minutes	7 hours					400mL	7000080037	★
										18 Liter Part A	7100260721	★
									18 Liter Part B	7100260722	★	

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**Strong performance in extreme temperatures**

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## 3M™ Scotch-Weld™ Heat-Cured Epoxies

Product (Color)	Key Features	Approx. Viscosity at 24°C (cP)	Cure Conditions		Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa				Size	Stock #	
			Time (min.)	Temp. C		-55°C	24°C	82°C	121°C			
2214 Hi-Temp New Formula (Gray) 	High temperature strength Environmental resistance UL 94 HB rating	Paste	60	121	4	19	19	19	17	6 oz. cart. 1 Liter 5 gal. pail	7000046474 7000079791 7010330200	★ ★
2214 Regular (Gray) 	High temperature strength Low temp curing UL 94 HB rating	Paste	40	121	9	21	31	31	10	6 oz. cart. 1 quart 5 gal. pail	7000000811 7000046356 7100111206	★

## 3M™ Scotch-Weld™ Primer


Product (Color)	Key Features	Viscosity (cP)	Color	Dry time (24°C-33°C)	Dry time (88°C)	Size	Stock #	
Metal Primer 3901	Improves metal and glass adhesion and increases environmental resistance	5	Red	1 hour	30 minutes	1/2 pint	7000000907	★

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### 3M™ Scotch-Weld™ Epoxy Adhesive DP420NS

3M™ Scotch-Weld™ Epoxy Adhesive DP420NS is a black, toughened, non-sag, two-part epoxy structural adhesive that provides good strength along with high impact and fatigue resistance. It can replace mechanical fasteners, screws, rivets and spot welds in many applications.




### 3M™ Scotch-Weld™ Epoxy Adhesive DP100 Clear

3M™ Scotch-Weld Epoxy Adhesive DP100 Clear 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™ Nylon Bonder

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-29°C	24°C	82°C			
DP8910NS 8910NS (Black) 	Bonds nylon and metal	10:1	45,000	10 minutes	16 minutes	18	15	22	11	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100246046 7100246043 7100233358 7100246044 7100234571 7100246045	* *

## 3M™ Scotch-Weld™ Standard MMA Acrylics

DP8405NS 8405NS (Green)	High impact Adhesion to most plastics	10:1	70,000	5 minutes	15 minutes	89	18	28	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100009688 7100011056 7100102180 7100027430 7100101506 7100084534	* * *
DP8407NS 8407NS (Green)  	High impact Adhesion to most plastics	10:1	20,000	7 minutes	24 minutes	89	23	31	10	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A	7100179482 7100179480 7100179264 7100105384 7100179442	* * * * *
DP8410NS 8410NS (Green)	High impact Adhesion to most plastics	10:1	70,000	10 minutes	25 minutes	89	25	28	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100024055 7100024045 7100102180 7100064830 7100101506 7100084532	* * *
DP8425NS 8425NS (Green) 	High impact Adhesion to most plastics	10:1	70,000	25 minutes	50 minutes	89	26	26	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100078165 7100078166 7100102180 7100255721 7100101506 7100084535	* * *

## 3M™ Scotch-Weld™ Low Odor Acrylics


DP8705NS 8705NS (Black)	Low odor Fast rate of strength build	10:1	80,000	5 minutes	6 minutes	60	30 (at -40°C)	16	4	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100245036 7100245039 7100233358 7100245037 7100234571 7100245038	* *
DP8710NS 8710NS (Black) 	Low odor Fast rate of strength build	10:1	80,000	10 minutes	13 minutes	60	30 (at -40°C)	16	4	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100233349 7100233348 7100233358 7100234572 7100234571 7100233166	* *
DP8725NS 8725NS (Black)	Low odor Fast rate of strength build	10:1	80,000	23 minutes	25 minutes	60	30 (at -40°C)	16	4	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100244858 7100244480 7100233358 7100244861 7100234571 7100244862	* *
DP810 810 (Tan) 	Tough durable bonds	1:1	20,000	10 minutes	20 minutes	53	8	25	3	48.5mL 400mL 10 Liter Kit	7100200509 7100200483 7000079966	* * *

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## 3M™ Scotch-Weld™ Low Odor Acrylics

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-29°C	24°C	82°C			
DP8805NS 8805NS (Green)	Low odor Fast rate of strength build	10:1	80,000	5 minutes	10 minutes	53	5	25	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100098631 7100097636 7100102180 7100097693 7100101506 7100097673	★ ★ ★
DP8810NS 8810NS (Green)	Low odor Fast rate of strength build	10:1	80,000	10 minutes	20 minutes	53	6	25	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100097574 7100075409 7100102180 7100097704 7100101506 7100097626	★ ★ ★ ★
DP8825NS 8825NS (Green)	Low odor Fast rate of strength build	10:1	80,000	25 minutes	50 minutes	36	7	21	6	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 55 gal. drum B	7100067297 7100068120 7100102180 7100067291 7100101506 7100084533	★ ★ ★

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

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-29°C	24°C	66°C			
DP8005 (Black)	Bonds polyolefins and low surface energy materials	10:1	25,000	3 minutes	3 hours	N/A	6	14	3	45mL 490mL	7100089475 7100089476	★ ★
DP8005 (Off-White)	Bonds polyolefins and low surface energy materials	10:1	25,000	3 minutes	3 hours	N/A	5	15	3	45mL 490mL 10 Liter pail B 2 Liter pail A	7100241346 7100240965 7000080038 7000080039	★ ★ ★ ★
DP8010 8010 (Blue)	Bonds polyolefins and low surface energy materials	10:1	20,000	10 minutes	1 hour	N/A	19	19	3	45mL 490mL	7100036717 7100036719	★ ★

KEY PRODUCT

## 3M™ Scotch-Weld™ Flexible Acrylics

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-40°C	24°C	82°C			
DP8610NS 8610NS (Black)	Very flexible and no read through on thin metals	10:1	130,000	10 minutes	18 minutes	100	24	7	2	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100233359 7100232802 7100233358 7100234673 7100234571 7100234570	★ ★
DP8625NS 8625NS (Black)	Very flexible and no read through on thin metals	10:1	130,000	23 minutes	28 minutes	100	24	7	2	45mL 490mL 1 gal. pail A 5 gal. pail B 5 gal. pail A 50 gal. drum B	7100244478 7100244477 7100233358 7100244476 7100234571 7100244859	★ ★

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## 3M™ Scotch-Weld™ Semi-Rigid Urethanes

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-40°C	24°C	82°C			
DP600 (Gray)	Concret repair Self-leveling	1:1	6,000	1 minute	4 minutes	36	22	16	5	48.5mL	7100148740	★
KEY PRODUCT * DP6310NS (Green)	Multi-purpose Energy absorbing 	1:1	Non-sag paste	9 minutes	45 minutes	36	24	25	6	48.5mL	7100109829	★
										400mL	7100109830	★
										5 gal. pail A	7100143960	★
										5 gal. pail B	7100143915	★
										50 gal. drum A	7010415316	★
										50 gal. drum B	7010412199	★
* DP6330NS (Green)	Multi-purpose Energy absorbing 	1:1	Non-sag paste	30 minutes	2 hours	36	25	25	7	48.5mL	7100109828	★
										400mL	7100109827	★
										5 gal. pail A	7100143961	
										5 gal. pail B	7100143701	
										50 gal. drum A	7010409611	
										50 gal. drum B	7010366145	
3535 B/A (Off-White)	Multi-purpose Semi-rigid bonds	1:1	30,000	3 minutes	30 minutes	44	17	14	2	5 gal. pail A	7010366160	
										5 gal. pail B	7010330223	

## 3M™ Scotch-Weld™ Flexible Urethanes

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-40°C	24°C	82°C			
* DP604NS 604NS (Black)	Flexible Non-sag	1:1	Paste	4 minutes	20 minutes	53	10	4	2	48.5mL	7100148738	★
										400mL	7100069452	
										5 gal. pail A	7010365926	
										5 gal. pail B	7010367265	
										55 gal. drum A	7010329538	
										55 gal. drum B	7010412243	
DP610 (Clear)	Flexible	1:1	30,000	10 minutes	2 hours	195	34	23	3	48.5mL	7100200503	★

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### 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™ Epoxy Adhesive DP125

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



## 3M™ Scotch-Weld™ Flexible Urethanes

Product (Color)	Key Features	Mix Ratio (Volume) B:A	Approx. Viscosity at 24°C (cP)	Approx. Mixed Work Life at 24°C	Approx. Time to Handling Strength at 24°C	Floating Roller Peel N/cm at 24°C	Overlap Shear: MPa			Size	Stock #	
							-40°C	24°C	82°C			
* DP620NS 620NS (Black)	Semi-flexible Non-sag	1:1	Paste	20 minutes	4 hours	71	21	17	3	48.5mL 400mL 5 gal. pail A 5 gal. pail B 55 gal. drum A 55 gal. drum B	7100148737 7000046372 7010329537 7010367262 7010301034 7010309744	* *
DP609 (Tan)	Flexible	1:1	30,000	7 minutes	45 minutes	70	17	14	2	48.5mL 400mL	7100200502 7000080396	* *
3549 (Brown)	Tough flexible bonds	1:1	25,000	60 minutes	8 hours	107	21	14	3	2 oz. kit 5 gal. pail A 5 gal. pail B	7000046484 7100041738 7100041737	

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

Product (Color)	Key Features	Viscosity @ 121°C (cP)	Approximate Open Time at 24°C	Approximate Time to Handling Strength at 24°C	Shore D	Elongation %	Size	Stock #	
TE030 (Off-White)	Fast set time High viscosity	16,000	1 minute	30 seconds	60	725	1/10 gal. 5 gal. 55 gal. drum	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.	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	7000000905 7000046540	*

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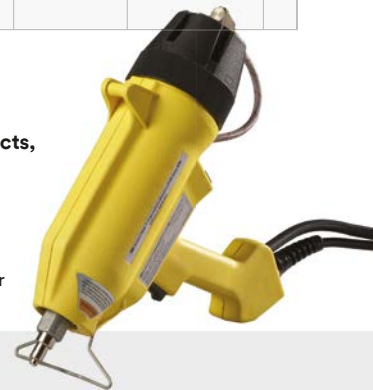
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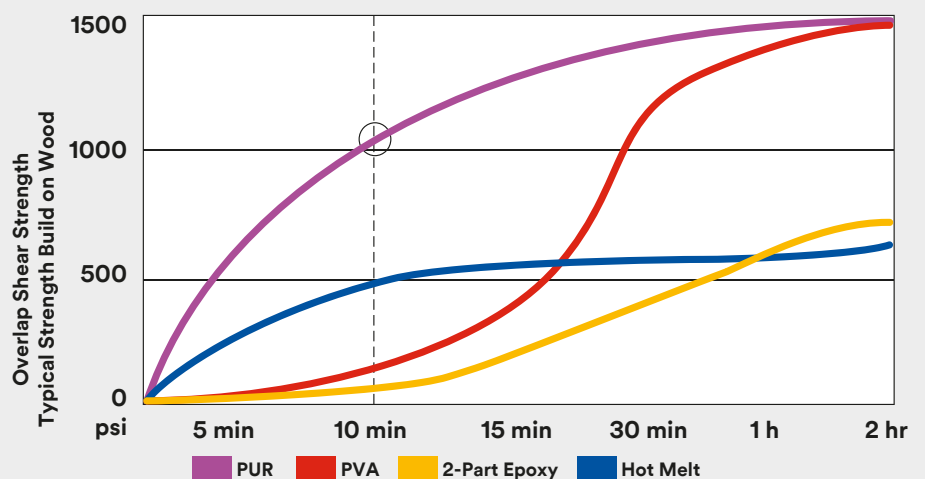
\* These products are in stock

3M™ Scotch-Weld™ PUR Easy 250 Applicator





### 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 @ 121°C (cP)	Approximate Open Time at 24°C	Approximate Time to Handling Strength at 24°C	Shore D	Elongation %	Size	Stock #	
TE031 (Black)	Fast set time, bonds a wide variety of plastics	13,000	2 minutes	30 seconds	50	725	1/10 gal. 5 gal.	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	7000000902 7000028589 7100096731	★ ★
TS230 (Black) 	Extrudable/sprayable, long open time, bonds plastics to metal, glass, wood, UL 94 HB and V-2 rating	9,000	4 minutes	150 seconds	45	700	1/10 gal. 2 kilo 5 gal. 55 gal. drum	7000000906 7000046541 7000121361 7100179521	★
KEY PRODUCT TS230 (Off-White) 	Extrudable/sprayable long open time, bonds plastics to metal, glass, wood, UL 94 HB and V-2 rating	9,000	4 minutes	150 seconds	45	700	1/10 gal. 2 kilo 5 gal. 55 gal. drum	7000000898 7000046534 7100024959 7100104259	★ ★
PURGE material 3756	Purge PUR adhesives from bulk dispensing equipment	8,250					5 gal.	7000121333	

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

Product	Description	Stock #	
Applicator	PUR Easy 250 Applicator, pneumatically dispenses 1/10 gal. cartridges	EU: 7000028622 UK: 7000046655	★ ★
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 Applicator Air Valve Kit Applicator Swivel Connector Applicator End Cap	7000028623 7000148288 7000046652 7000046653 7000046666	
Alternate Nozzle System not for use with disposable nozzles	Applicator Main Nozzle Applicator Extension Tip, .072 in orifice Applicator Tip, .063 in orifice Applicator Tip Cap Applicator Valve Assembly	7000046672 7000046669 7000046670 7100005819 7000046650	★ ★

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

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	Stock #	
KEY PRODUCT PR100 (Clear)	General purpose, low viscosity plastic bonder	100	-54° to 82°C	10-20 sec.	24	20 gram bottle 50 gram bottle 500 gram bottle	7100033657	★
							7100033726	★
							7100033708	★
PR1500 (Clear)	General purpose, high viscosity for gap filling	1,500	-54° to 82°C	20-60 sec.	24	50 gram bottle 500 gram bottle	7100034078	★
							7100034071	★

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

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	Stock #	
SI Gel (Clear)	Fast cure, gel viscosity for max gap filling	Gel	-54° to 82°C	20-60 sec.	24	20 gram tube 300 gram cart.	7100034061 7100027510	★ ★
SI1500 (Clear)	High viscosity for gap filling	1,500	-54° to 82°C	5-60 sec.	24	20 gram bottle	7100040836	★

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

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	Stock #	
SF20 (Clear)	Fast cure Optimum performance on wide range of rubbers and plastics	20	-54° to 82°C	4-30 sec.	24	20 gram bottle	7100034279	★
SF100 (Clear)	Fast cure, high strength with EPDM and other elastomers	100	-54° to 82°C	4-30 sec.	24	20 gram bottle 50 gram bottle 500 gram bottle	7100034060	★
							7100034525	★
							7100033985	★

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

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

**KEY PRODUCT** Denotes product to consider first in this category

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

★ These products are in stock

### 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. **DP8407NS, DP8610NS, DP8710NS and DP8805NS**



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

Product (Color)	Key Features	Typical Viscosity (cP)	Time to Handling	Full Cure (Hours)	Size	Stock #	
AC77	Instant adhesive primer for bonding of difficult-to-bond plastics such as polyethylene, polypropylene and polyacetal	<3	1-5 sec.	24	20 ml bottle 1 Liter bottle	7100027600 7100027284	* *
AC11	Suitable for use with slower curing, high viscosity grades, and with porous substrates where the adhesive must cure before being absorbed into the substrate.	1	10-30 sec.	24	200 ml aerosol	7100027507	*

## 3M™ Scotch-Weld™ Anaerobic Adhesives – Threadlockers

Product (Color)	Key Features	Typical Viscosity (cP)	Temperature Range	Time to Handling	Full Cure (Hours)	Size	Stock #	
TL42 (Blue)	Nutlock - medium strength, general purpose	1,200	-54° to 149°C	< 30 minutes	24	10mL bottle 50mL bottle 250mL bottle	7100034098 7100033986 7100034072	* * *
TL43 (Blue)	Oil tolerant, medium strength, general purpose	3,300	-54° to 149°C	< 30 minutes	24	50mL bottle 250mL bottle	7100034008 7100034865	* *
TL71 (Red)	Permanent studlock for bolts and studs up to 25mm	500	-54° to 204°C	< 30 minutes	24	50mL bottle	7100040843	*

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

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

**KEY PRODUCT** Denotes product to consider first in this category

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

\* These products are in stock

### 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. **TL71, TL42 and TL43**










### 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 centimeter bonds several thousand kilogram of holding power. They provide proven, world record strength with a hold of 8 metric tons. **PR20, PR100 and PR1500**









## Applicators

Product	Stock #	Product Features	
Manual Applicator for 45 ml/48,5 ml/50 ml cartridges	7100205939	<ul style="list-style-type: none"> <li>• Lightweight and mobile handset</li> <li>• Suitable for smaller volumes</li> </ul>	
Manual Applicator for 200 ml cartridges (for 2:1 and 1:1)	7000041367	<ul style="list-style-type: none"> <li>• Suitable for medium volumes</li> </ul>	
Manual Applicator for 400 ml cartridges (for 2:1 and 1:1)	7100244651	<ul style="list-style-type: none"> <li>• Suitable for big volumes</li> </ul>	
Manual Applicator for 490 ml cartridges (for 10:1)	7100244652	<ul style="list-style-type: none"> <li>• Suitable for big volumes</li> </ul>	
Pneumatic Applicator for 50 ml cartridges (for 2:1 and 1:1)	7000070273	<ul style="list-style-type: none"> <li>• Allows precise and fatigue-free work</li> </ul>	
Pneumatic Applicator for 400 ml cartridges (for 2:1 and 1:1)	7100230151	<ul style="list-style-type: none"> <li>• Allows precise and fatigue-free work</li> </ul>	
Pneumatic Applicator for 490 ml cartridges (for 10:1)	7100244653	<ul style="list-style-type: none"> <li>• Allows precise and fatigue-free work</li> </ul>	

## Plungers

Product	Stock #	
Plunger for 1:1 and 2:1	7000006768	
Plunger for 10:1	7000062909	

## Nozzles

Product	Stock #	approx. length in mm	
Quadro mixing nozzle for 45 ml cartridges, 10:1	7100202930	90	
Quadro mixing nozzle for 48,5 ml or 50 ml cartridges, 2:1 and 1:1	7100262488	85	
Helical mixing nozzle for 48,5 ml or 50 ml cartridges, 2:1 and 1:1	7100148766	157	
Helical mixing nozzle for 490 ml cartridges	7100015959	240	
Mixing nozzle for 200 ml or 400 ml cartridges	7000043674	275	
Mixing nozzle for 400 ml cartridges (for DP6310/6330)	7100247630	127	



# Global Adhesive Solutions Lab **Neuss**

As a globally active enterprise, we are among the pioneers and providers of inspiration in many areas. Particularly in the field of adhesives, we are leading the way for the economy. So it makes sense for us to cooperate with partners who have a very high level of technical expertise. We show visitors of our Global Adhesive Solutions Lab high-tech equipment of the world's leading companies used in combination with 3M adhesive technology.

This is where we process a wide range of 3M products - primarily 1K and 2K adhesives, hot melts as well as spray adhesives and adhesive tapes.

Our demonstrations ensure that you can experience various automated application methods, the process control and a comprehensive range of 3M services. This also includes the force-controlled application of our VHB tape using a specially developed application head.

We will show you automated bonding processes and the use of the correct materials for the relevant area of application. You will have the opportunity to actively exchange ideas with the experts, contribute your own ideas and develop solutions in cooperation with 3M.



# 3M technology transfer to ensure efficient working, today, tomorrow and in the future.

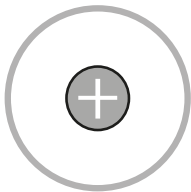
## Our service to you



**Training**  
Individual training and practical experience



**Solutions**  
Identify new innovative perspectives



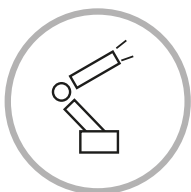
**Expertise**  
Access to the entire expertise of a global enterprise



**Instructions**  
Individual product and process instructions

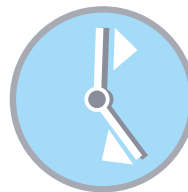


**Support**  
Support from 3M application technology



**Demonstration**  
Automated applications using high-tech equipment

## Your process optimization



**Shorter processing times**



**Increase in productivity**



**Improved cost-effectiveness**



**Lasting sustainability**



**Light-weight**



**eco-friendly materials**



**Increase in quality**



**Technological advance**

# 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™ Hand Pad 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™ Hand Pad 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



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