

The Advantage of Acrylic Adhesives

Manufacturers around the world rely on acrylic adhesives to design and produce innovative new products. Acrylic adhesives improve aesthetics, bond to plastics and metals, and even deliver a secure bond between oily or contaminated surfaces. Despite improving many aspects of the assembly process, traditional acrylic adhesives have been challenged by:

- High levels of odors that can cause EHS concerns
- Longer set times that slow assembly processes
- Lower impact resistance that result in brittle bonds
- Limited shelf life

Next Generation Advancements

The 3M™ Scotch-Weld™ Structural Adhesives product development team focused on solving these challenges in the next generation of structural acrylic adhesives. Key features of these new acrylic adhesives include:

Lower Odor

The 8800 family of products features a new low odor, non-flammable formulation that your entire team will appreciate.

- Faster Cure DP8805NS cures almost twice as fast as ordinary acrylic adhesives.
- Higher Impact Resistance

 DP8405NS has over three times
 the impact strength of conventional
 acrylic adhesives.
- No Refrigeration & 18-Month Shelf Life \$
 Easier storage and longer shelf life can help to reduce scrap and disposal costs due to expired inventory.

Designed for innovation, 3M™ Scotch-Weld™ Structural Acrylic Adhesives will help you improve both productivity and performance, while reducing environmental concerns and costs.



3M[™] Scotch-Weld[™] Structural Acrylic Adhesives

	1 (50)	Duo-Paks		BULK I	PART B	BULK PART A		
	PRODUCT	45 mL	490 mL	5 Gallon Pail	55 Gallon Drum	A3-1 Accelerator 1 Gallon Can	A3-1 Accelerator 5 Gallon Pail	
-	8405NS Green	62-2856-1445-9	62-2856-3630-4	62-2856-8530-1	62-2856-9530-0	62-2952-7530-9	62-2952-8530-8	
		000 51115 68963 5	000 51115 68964 2	000 51115 68986 4	000 51115 68987 1	000 51115 68981 9	000 51115 68980 2	
	8410NS Green	62-2860-1445-1	62-2860-3630-6	62-2860-8530-3	62-2860-9530-2	62-2952-7530-9	62-2952-8530-8	
		000 51115 70994 4	000 51115 70995 1	000 51115 70997 5	000 51115 71101 5	000 51115 68981 9	000 51115 68980 2	
	8805NS Green	62-2852-1445-8	62-2852-3630-3	62-2852-8530-0	62-2852-9530-9	62-2952-7530-9	62-2952-8530-8	
		000 51115 68958 1	000 51115 68959 8	000 51115 68979 6	000 51115 68984 0	000 51115 68981 9	000 51115 68980 2	
	8810NS Green	62-2854-1445-4	62-2854-3630-9	62-2854-8530-6	62-2854-9530-5	62-2952-7530-9	62-2952-8530-8	
		000 51115 68960 4	000 51115 68962 8	000 51115 68982 6	000 51115 68985 7	000 51115 68981 9	000 51115 68980 2	

Hardware

PRODUCT	SIZE	Units/Case	STOCK#	UPC
EPX Plus II Applicator	45 mL	10	62-9170-9930-1	000 21200 50004 6
Plunger 10:1	45 mL	10	62-9160-9910-4	000 51115 69044 0
Square Nozzle (orange)	45 mL	36	62-9154-9136-9	000 51115 69043 3
Pneumatic Applicator 10:1	490 mL	1	62-9152-9930-9	000 51115 69041 9
Manual Applicator 10:1	490 mL	1	62-9182-9930-6	000 51115 71115 2
Helical Nozzle (orange)	490 mL	36	62-9158-9136-0	000 51115 69042 6

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3M[™] Scotch-Weld[™] Structural Acrylic Adhesives

DP8405NS, DP8410NS, DP8805NS, DP8810NS



Enhance Productivity and Performance



3M™ Scotch-Weld™ Structural Acrylic Adhesives

Solving the Challenges of Speed, Strength and Shelf Life

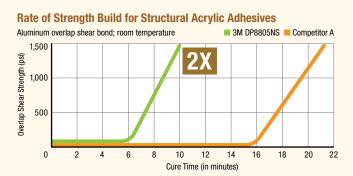
Next Generation Structural Acrylic Adhesives from 3M bond faster and deliver higher impact resistance, helping you to build better products and improve productivity.



Faster Rate of Strength Build 🚅

Designed for productivity, DP8805NS can reach over 1,000 psi of overlap shear strength in less than nine minutes. Its rate of strength build is twice as fast as ordinary acrylic adhesives.

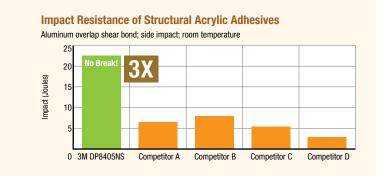
The advantage: higher throughput and increased productivity.



Higher Impact Resistance

DP8405NS has over three times the impact strength of ordinary acrylic adhesives. Higher impact resistance makes it ideal for many industrial applications, helping build stronger products for challenging applications.

The advantage: improved impact resistance helps make your products more durable.

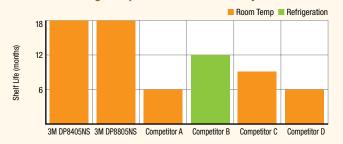


Longer Shelf Life, Easier Storage \$

3M's Next Generation Structural Acrylic Adhesives do not require refrigeration, making them easier to store. They also have an 18-month shelf life, more than double that of conventional acrylic adhesives, which can help to reduce scrap and disposal costs due to expired inventory.

The advantage: reduced costs and improved logistics.





3M Next Generation Structural Acrylic Adhesives Features & Benefits

Feature:

Bonds powder coats and slightly oily surfaces

- High peel strength
- Elevated temperature performance
- Low chlorine / bromine
- Colored dye in accelerator
- Glass beads for controlled bond line thickness
- Longer nozzle life than similar, fast curing acrylics
- Lower exotherm than similar, fast curing acrylics
- Heat-accelerated cure when needed

Benefit:

- Structural bonds to difficult-to-bond materials
- Reduce product failure
- Maintains structural strength at 180°F (82°C)
- Fewer halogens means a better EHS profile and ideal for electronics
- Visual confirmation of mix ratio ensures quality of bond
- Structural bonds with consistent quality
- Fewer nozzle changeovers saves money
- Less heat generated is ideal for heat-sensitive substrates
- Structural strength in seconds at 150°F (70°C)

Enhancing Processes and Improving Products

Next Generation Structural Acrylic Adhesives from 3M are ideal for many applications, providing you the opportunity to improve both products and processes. Their faster set times allow you to enhance productivity, while their higher impact resistance and performance features can help improve your products. Markets and applications include:



- Panel to frame bonding
- Trim attachment

Signage

- Letter bonding
- Seam sealing Frame assembly



HVAC

- Floor panel and drain pan to frame
- Side wall panel attachment to frame
- Stiffener to panel



Transportation

- Metal skin to metal frame
 - Composite cab assembly
 - Frame assembly
 - Floor panel bonding
 - Exterior panel bonding
 - Roof bonding

Structural Acrylic Adhesive Key Properties

Product	Key Features	Mix Ratio B:A (Volume)	Approximate Mixed Viscosity at 72°F (22°C)	Approximate Work Life at 72°F (22°C)	Approximate Time to Structural Strength at 72°F (22°C)	Overlap Shear to Aluminum at 72°F (22°C)	Overlap Shear to Aluminum at 180°F (82°C)	Floating Roller Peel to Aluminum at 72°F (22°C)
DP8405NS Green	High impactAdhesion to most plastics	10:1	70,000 cP	5 minutes	15 minutes	4,100 psi	900 psi	50 piw
DP8410NS Green	High impactAdhesion to most plastics	10:1	70,000 cP	10 minutes	25 minutes	4,100 psi	800 psi	50 piw
DP8805NS Green	Low odorFast rate of strength build	10:1	80,000 cP	5 minutes	10 minutes	3,600 psi	900 psi	30 piw
DP8810NS Green	Low odorFast rate of strength build	10:1	80,000 cP	10 minutes	20 minutes	3,600 psi	800 psi	30 piw



Everyone on your team will appreciate the low odor formulation of our new 8800 series of Structural Acrylic Adhesives. They are a dramatic improvement over traditional formulations, and will help improve your environment and worker health with their reduced odor and non-flammable formulations.