Structural Acrylic Adhesives
Enhance Productivity and Performance
3M™ Scotch-Weld™ Structural Acrylic Adhesives

Solving the challenges of speed, strength, shelf life, odor, and high and low temperature performance.

### Enhanced Productivity

With minimal surface prep, quick cure rates and fast rate of strength builds, DP8705NS 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.

![Enhanced Productivity Graph](image)

### Higher Impact Resistance

DP8710NS and DP8407NS have over ten times the side impact strength of other acrylic adhesives. Higher impact resistance makes them ideal for many industrial applications, helping build stronger products for challenging applications.

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

![Higher Impact Resistance Graph](image)

### Longer Shelf Life and Easier Storage

3M’s Structural Acrylic Adhesives do not require refrigeration, making them easier to store. Formulations also have a 12-18 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.

![Longer Shelf Life and Easier Storage Graph](image)
Enhancing Processes and Improving Products

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:

### Signage
- Panel to frame bonding
- Trim attachment
- 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 and exterior panel bonding
- EV battery bonding
- Roof bonding

---

**3M Structural Acrylic Adhesives Features & Benefits***

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-flammable classification and low odor formulation</td>
<td>Helps improve the working environment</td>
</tr>
<tr>
<td>Limits bond line read-through</td>
<td>Helps thin, flat surfaces maintain their aesthetic appearance</td>
</tr>
<tr>
<td>Structurally bonds to nylon (polyamides) without plasma or flame treatment surface preparation</td>
<td>Helps reduce costs and production time</td>
</tr>
<tr>
<td>Flexible like a sealant</td>
<td>For greater impact resistance</td>
</tr>
<tr>
<td>Bonds powder coats and slightly oily surfaces</td>
<td>Structural bonds to difficult-to-bond materials</td>
</tr>
<tr>
<td>High peel strength</td>
<td>Reduce product failure</td>
</tr>
<tr>
<td>Elevated, extreme temperature performance</td>
<td>Maintains structural strength from -40°F (-40°C) to 180°F (82°C)</td>
</tr>
<tr>
<td>Low chlorine / bromine / low halogen</td>
<td>Fewer halogens means a better EHS profile and ideal for electronics</td>
</tr>
<tr>
<td>Colored pigment in accelerator</td>
<td>Visual confirmation of mix ratio ensures correct adhesive curing</td>
</tr>
<tr>
<td>Glass beads for controlled bond line thickness</td>
<td>Structural bonds with consistent quality</td>
</tr>
<tr>
<td>Longer nozzle life</td>
<td>Fewer nozzle changeovers saves money</td>
</tr>
</tbody>
</table>

*These features/benefits do not apply to all individual acrylics.*
3M™ Scotch-Weld™ Flexible Acrylic Adhesive 8600 Series

The strength of a structural acrylic.  
The flexibility of a sealant.

Offering a unique set of benefits, 3M™ Scotch-Weld™ Flexible Acrylic Adhesive 8600 Series provides the flexibility of a sealant combined with the strength and cure speed of an acrylic adhesive, allowing you to be more flexible in your design.

- **Limits bond line read-through:** Helps thin, flat surfaces maintain their aesthetic appearance.
- **Flexible like a sealant:** For greater impact resistance.
- **High elongation up to 200%:** Withstands stresses between dissimilar materials.

3M™ Scotch-Weld™ Low Odor Acrylic Adhesive 8700 Series

Low odor. High strength.  
Improved formulation for enhanced workplace safety and productivity.

The 3M™ Scotch-Weld™ Low Odor Acrylic Adhesive 8700 Series is formulated to work better, including in cold temperatures. These structural adhesives, with improved GHS classifications*, have a low odor formulation and non-flammable classification to help improve the working environment.

- **Non-flammable classification and low odor formulation:** to help improve the working environment.
- **Reliable cold temperature performance:** Now rated to -40°C.
- **Excellent structural strength, peel and impact resistance:** Components stay bonded even under severe stress.
  
*Compared to competitive acrylic adhesives.

3M™ Scotch-Weld™ Nylon Bonder Structural Adhesive DP8910NS

Easier bonding to nylon opens up new possibilities.

Bonding nylon requires an adhesive that can withstand the heat of your applications, and does not require flame treatment surface prep. 3M™ Scotch-Weld™ Nylon Bonder Structural Adhesive DP8910NS is the high temperature bonding solution that can take the heat and requires minimal surface prep prior to bonding.

- **Structurally bonds to nylon (polyamides) without plasma or flame treatment surface preparation:** Helps reduce costs and production time.
- **Ideal for high temperature and high humidity applications:** Adhesive is high temperature and humidity resistant.
- **Bond nylon to dissimilar materials such as aluminum and stainless steel:** Better compatibility gives you more options.
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 Environmental, Health & Safety concerns
- Lower impact resistance that result in brittle bonds
- Limited shelf life and refrigeration required

Structural Adhesive Advancements

The 3M™ Scotch-Weld™ Structural Adhesives product development team focused on solving these challenges in their ongoing improvement of structural acrylic adhesive products. Key features of these new acrylic adhesives include:

- **Low Odor Formulation and Non-Flammable Classification**
  The 8600, 8700 and 8800 family of products features a low odor, non-flammable formulation that your entire team will appreciate.

- **Faster Cure**
  DP8705NS and DP8805NS cure almost twice as fast as ordinary acrylic adhesives with the same work life.

- **Higher Impact Resistance**
  DP8610NS, DP8710NS and DP8405NS have over three times the impact strength of conventional acrylic adhesives.

- **High & Low Temperature Performance**
  DP8910NS is the high temperature bonding solution that doesn't require surface prep prior to bonding. DP8710NS has reliable cold temperature performance, now rated to -40 degrees C.

- **Nylon and LSE bonding**
  High strength bonding of multiple substrates like LSE plastics (DP8010) and nylon (DP8910).

- **No Refrigeration & 12-18 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 and help enhance workplace safety.
| Product (Color) | Key Features | Mix Ratio (Volume) | A: B | Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate | Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity Approximate Viscosity | Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate | Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Approximate Appr
## 3M™ Scotch-Weld™ Structural Acrylic Adhesives

| MMA | High impact Adhesion to most plastics | 1:1 | 60,000 | 5 minutes | 15 minutes | 50 | 4,200 | 4,400 | 1300 | 45ml | 490ml | 1 gal. can A | 5 gal. pail B | 5 gal. pail A | 55 gal. drum B | UPC | Site |
| DP8425NS (Green) | 45ml | 490ml | 1 gal. can A | 5 gal. pail B | 5 gal. pail A | 55 gal. drum B | 00-051115-71003-3 | 00-051115-71004-0 | 00-051115-68981-9 | 00-051115-68983-6 | 62-2856-1445-7 | 62-2860-3630-2 | 62-2952-7530-9 | 62-2853-8530-9 | 62-2953-8530-8 | 62-2853-9530-8 |
| DP8407NS (Gray) | 45ml | 490ml | 1 gal. can A | 5 gal. pail B | 5 gal. pail A | 55 gal. drum B | 00-076308-86273-2 | 00-076308-86285-5 | 00-076308-86369-1 | 00-076308-86367-8 | 00-076308-89878-4 | 00-076308-86373-6 | 00-076308-86291-2 | 00-076308-89885-8 | 780246046 | 780246014 |

## NYLON BONDER

| Product | Bonds nylon and metal | 1:1 | 45,000 | 10 minutes | 16 minutes | 18 | 2,600 | 3,700 | 1500 | 45ml | 490ml | 1 gal. can A | 5 gal. pail B | 5 gal. pail A | 55 gal. drum B | UPC | Site |
| DP8910NS (Black) | 45ml | 490ml | 1 gal. can A | 5 gal. pail B | 5 gal. pail A | 55 gal. drum B | 00-638060-40976-3 | 00-638060-40977-0 | 00-638060-40862-9 | 00-638060-40979-4 | 00-638060-40982-4 | 780246046 | 780246043 | 780233335 | 780234571 | 780246044 | 780246045 |

## Hardware

| PRODUCT | SIZE | UNITS/CASE | UPC | STOCK # |
| EPX Plus II Applicator | 45 mL | 10 | 00-021200-50004-6 | 62-9170-9930-1 |
| Plunger | 1:1 | 45 mL | 10 | 00-051115-69044-0 | 62-9160-9910-4 |
| Square Orange Nozzle | 45 mL | 36 | 00-051115-69043-3 | 62-9154-9136-9 |
| Dual Drive Pneumatic Applicator 1:1 | 490 mL | 1 | 00-638060-40979-0 | 62-9152-9931-7 |
| Dual Drive Manual Applicator 1:1:2:1 | 490 mL | 1 | 00-638060-40974-5 | 62-9182-9931-4 |
| Helical Orange Nozzle | 490 mL | 36 | 00-051115-69042-6 | 62-9158-9136-0 |
| Square Green Nozzle | 490 mL | 36 | 00-051115-81619-2 | 62-9184-9490-7 |

**Technical Information:** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product 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. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user’s method of application. **Warranty, Limited Remedy, and Disclaimer:** Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M and Scotch-Weld, are trademarks of 3M Company, Please recycle. Printed in USA. © 2021 3M. All rights reserved. 78-9236-7264-2

3M Center Building 225-35-06
St. Paul, MN 55144-1000
1-800-362-3550
www.3M.com/structuralacrylics