

# Technical Data Sheet

## 3M™ Scotch-Weld™ Epoxy Adhesive DP105 Clear

### Product Description

3M™ Scotch-Weld™ Epoxy Adhesive DP105 Clear is available in larger containers like 3M™ Scotch-Weld™ Epoxy Adhesive 105 B/A Clear. 3M™ Scotch-Weld Epoxy Adhesive DP105 Clear is a fast setting, very flexible 1:1 mix ratio epoxy adhesive/sealant. Its flexibility when cured makes it ideal for applications involving dissimilar surfaces where thermal coefficient of expansion may be a problem. It is also unique in that it retains its clear, colorless properties longer than most 5 minute epoxies.

### Product Features

- 4 minute worklife
- High peel strength
- Flexible
- 1:1 mix ratio
- Clear

### Technical Information Note



The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

### Typical Uncured Physical Properties

Property	Values	Additional Information
Color	Clear	<a href="#">View</a> 

Notes: Colors may vary from nearly white to yellow/amber. Adhesive performance is not affected by color variation.

Base Color	Clear	
Accelerator Color	Clear	

Base Viscosity	1,000-5,000 cP	<a href="#">View</a> 
Test Method: 3M C1d Temp C: 27C Temp F: 80F Notes: Procedure involves Brookfield RVF, #7 spindle, 20 rpm. Measurement taken after 1 minute rotation.		
Accelerator Viscosity	8,000-16,000 cP	<a href="#">View</a> 







Test Method: 3M C1d  
Temp C: 27C

Temp F: 80F


Notes: Procedure involves Brookfield RVF, #7 spindle, 20 rpm. Measurement taken after 1 minute rotation.


Base Resin	Epoxy
Accelerator Resin	Mercaptan
Base Net Weight	9.1 to 9.5 lb/gal
Accelerator Net Weight	9.4 to 9.8 lb/gal
Mix Ratio by Volume (B:A)	1:1
Mix Ratio by Weight (B:A)	1:0.97

### Typical Mixed Physical Properties

Property	Values	Additional Information
Open Time	5 min	<a href="#">View</a> 
Notes: POR=Pop Off Rubber		
Exotherm max temp	37 °C	<a href="#">View</a> 
Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.		
Exotherm max temp	98 °F	<a href="#">View</a> 
Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.		
Exotherm time to reach max temp	5 min	<a href="#">View</a> 
Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.		
Exotherm max temp	110 °C	<a href="#">View</a> 
Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.		
Exotherm max temp	230 °F	<a href="#">View</a> 

Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.


Exotherm time to reach max temp	3 min	<a href="#">View</a> 
Notes: Exotherm determined using the stated mass mixed for 1 minute and then by electronic thermocouple measuring the peak temperature and time to that temperature.		

Worklife, 2g mixed	5 min	<a href="#">View</a> 
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Test Method: 3M C3180

Temp C: 23C  
Temp F: 73F

Notes: Procedure involves periodically measuring a 2 gram mixed mass for self leveling and wetting properties. This time will also approximate the usable worklife in an 3M™ EPX™ Applicator mixing nozzle.

Worklife, 20g mixed	4 min	<a href="#">View</a> 
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Test Method: 3M C3180

Temp C: 23C  
Temp F: 73F


Notes: Procedure involves periodically measuring a 2 gram mixed mass for self leveling and wetting properties. This time will also approximate the usable worklife in an 3M™ EPX™ Applicator mixing nozzle.

Worklife	3 to 4 min	<a href="#">View</a> 
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Test Method: 3M C3180

Temp C: 23C  
Temp F: 73F

Notes: Procedure involves periodically measuring a 2 gram mixed mass for self leveling and wetting properties. This time will also approximate the usable worklife in an 3M™ EPX™ Applicator mixing nozzle.

Set Time (min)	20 min	<a href="#">View</a> 
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Temp C: 23C  
Temp F: 73F

Notes: Minimum time required to achieve 50 psi of overlap shear strength. Cure times are approximate and depend on adhesive temperature.

Tack Free Time	10 min	<a href="#">View</a> 
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Test Method: 3M C3173

Notes: Involves dispensing 0.5 gram amount of adhesive onto substrate and testing periodically for no adhesive transfer to metal spatula.

Time to Full Cure	0.33 hr	<a href="#">View</a> 
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Temp C: 23C  
Temp F: 73F

Notes: The cure time is defined as that time required for the adhesive to achieve a minimum of 80% of the ultimate strength as measured by aluminum-aluminum OLS.

Time to Full Cure	48 hr	<a href="#">View</a> 
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Temp C: 23C  
Temp F: 73F


Rate of Strength Buildup 1hr	250 lb/in <sup>2</sup>	
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View 

Test Method: ASTM D1002

Test Name: Overlap Shear Strength  
Dwell/Cure Time: 1.0  
Dwell Time Units: hr  
Temp C: 23C  
Temp F: 72F  
Substrate: Etched Aluminum

Notes: 1 in wide 1/2 in overlap specimens with 1 in x 4 in substrates. 0.005-0.008in bondline. Jaw separation 0.1 in/min. Substrate thickness 0.05-0.064 in

Rate of Strength Buildup 6hr 500 lb/in<sup>2</sup> View 

Test Method: ASTM D1002

Test Name: Overlap Shear Strength  
Dwell/Cure Time: 6.0  
Dwell Time Units: hr  
Temp C: 23C  
Temp F: 72F  
Substrate: Etched Aluminum

Notes: 1 in wide 1/2 in overlap specimens with 1 in x 4 in substrates. 0.005-0.008in bondline. Jaw separation 0.1 in/min. Substrate thickness 0.05-0.064 in

Rate of Strength Buildup 1day 1000 lb/in<sup>2</sup> View 

Test Method: ASTM D1002

Test Name: Overlap Shear Strength  
Dwell/Cure Time: 1.0  
Dwell Time Units: day  
Temp C: 23C  
Temp F: 72F  
Substrate: Etched Aluminum

Notes: 1 in wide 1/2 in overlap specimens with 1 in x 4 in substrates. 0.005-0.008in bondline. Jaw separation 0.1 in/min. Substrate thickness 0.05-0.064 in

Rate of Strength Buildup 7day 2000 lb/in<sup>2</sup> View 

Test Method: ASTM D1002

Test Name: Overlap Shear Strength  
Dwell/Cure Time: 7.0  
Dwell Time Units: day  
Temp C: 23C  
Temp F: 72F  
Substrate: Etched Aluminum

Notes: 1 in wide 1/2 in overlap specimens with 1 in x 4 in substrates. 0.005-0.008in bondline. Jaw separation 0.1 in/min. Substrate thickness 0.05-0.064 in

Rate of Strength Buildup 1month 2000 lb/in<sup>2</sup> View 

Test Method: ASTM D1002

Test Name: Overlap Shear Strength  
Dwell/Cure Time: 1.0  
Dwell Time Units: month  
Temp C: 23C  
Temp F: 72F  
Substrate: Etched Aluminum

Notes: 1 in wide 1/2 in overlap specimens with 1 in x 4 in substrates. 0.005-0.008in bondline. Jaw separation 0.1 in/min. Substrate thickness 0.05-0.064 in

## Typical Physical Properties

Property	Values	Additional Information
Color	Clear	<a href="#">View</a>
Test Name: Cured		

### Typical Cured Characteristics

Property	Values	Additional Information
Shore D Hardness	27	<a href="#">View</a>

Test Method: ASTM D2240

Temp C: 23C

Temp F: 73F

Tensile Strength	600 lb/in <sup>2</sup>	<a href="#">View</a>
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Test Method: ASTM D882

Dwell/Cure Time: 2.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: +2 hr @ 160F(71C)

Notes: Samples were 2 in. dumbbells with 0.125 in. neck and .030 in. sample thickness. Separation rate was 2 inches per minute.

Weight Loss by Thermal Gravimetric Analysis (TGA)	1%	<a href="#">View</a>
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Test Method: ASTM E1131

Temp C: 117C

Temp F: 243F

Notes: Weight loss by Thermal Gravimetric Analysis reported as that temperature at which 5% weight loss occurs by TGA in air at 5°C (9°F) rise per minute.

Thermal Shock Resistance	Pass 5 cycles without cracking	<a href="#">View</a>
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Test Method: 3M C3174

Notes: Involves potting a metal washer into a 2 in. x 0.5 in. thick section and cycling this test specimen to colder and colder temperatures.

Weight Loss by Thermal Gravimetric Analysis (TGA)	289 °C	<a href="#">View</a>
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Test Method: ASTM E1131







Notes: Weight loss by Thermal Gravimetric Analysis reported as that temperature at which 5% weight loss occurs by TGA in air at 5°C (9°F) rise per minute.

Weight Loss by Thermal Gravimetric Analysis (TGA)	552 F	<a href="#">View</a>
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Test Method: ASTM E1131










Notes: Weight loss by Thermal Gravimetric Analysis reported as that temperature at which 5% weight loss occurs by TGA in air at 5°C (9°F) rise per minute.

### Typical Performance Characteristics


Property	Values	Additional Information
Elongation (%)	120 %	<a href="#">View</a> 
<p>Test Method: ASTM D882</p> <p>Dwell/Cure Time: 2.0 Dwell Time Units: hr Temp C: 23C Temp F: 72F Environmental Condition: +2 hr @ 160F(71C)</p> <p>Notes: Samples were 2 in. dumbbells with 0.125 in. neck and .030 in. sample thickness. Separation rate was 2 inches per minute.</p>		
T-Peel Adhesion -55C Etched Aluminum	3 lb/in width	<a href="#">View</a> 
<p>Test Method: ASTM D1876</p> <p>Test Name: T-Peel Adhesion Temp C: -55C Temp F: -67F Substrate: Etched Aluminum</p> <p>Notes: T-peel strengths were measured on 1 in. wide bonds at 73°F (23°C). The testing jaw separation rate was 20 inches per minute. The substrates were 0.020 in. thick. Samples dwelled for 24 hrs at 23C + 2 hrs at 71C before testing.</p>		
T-Peel Adhesion 23C Etched Aluminum	35 lb/in width	<a href="#">View</a> 
<p>Test Method: ASTM D1876</p> <p>Test Name: T-Peel Adhesion Temp C: 23C Temp F: 73F Substrate: Etched Aluminum</p> <p>Notes: T-peel strengths were measured on 1 in. wide bonds at 73°F (23°C). The testing jaw separation rate was 20 inches per minute. The substrates were 0.020 in. thick. Samples dwelled for 24 hrs at 23C + 2 hrs at 71C before testing.</p>		
T-Peel Adhesion 49C Etched Aluminum	5 lb/in width	<a href="#">View</a> 
<p>Test Method: ASTM D1876</p> <p>Test Name: T-Peel Adhesion Temp C: 49C Temp F: 120F Substrate: Etched Aluminum</p> <p>Notes: T-peel strengths were measured on 1 in. wide bonds at 73°F (23°C). The testing jaw separation rate was 20 inches per minute. The substrates were 0.020 in. thick. Samples dwelled for 24 hrs at 23C + 2 hrs at 71C before testing.</p>		
T-Peel Adhesion 66C Etched Aluminum	2 lb/in width	<a href="#">View</a> 
<p>Test Method: ASTM D1876</p> <p>Test Name: T-Peel Adhesion Temp C: 66C Temp F: 150F Substrate: Etched Aluminum</p> <p>Notes: T-peel strengths were measured on 1 in. wide bonds at 73°F (23°C). The testing jaw separation rate was 20 inches per minute. The substrates were 0.020 in. thick. Samples dwelled for 24 hrs at 23C + 2 hrs at 71C before testing.</p>		
T-Peel Adhesion 82C Etched Aluminum	1 lb/in width	<a href="#">View</a> 
<p>Test Method: ASTM D1876</p> <p>Test Name: T-Peel Adhesion Temp C: 82C Temp F: 180F Substrate: Etched Aluminum</p> <p>Notes: T-peel strengths were measured on 1 in. wide bonds at 73°F (23°C). The testing jaw separation rate was 20 inches per minute. The</p>		



substrates were 0.020 in. thick. Samples dwelled for 24 hrs at 23C + 2 hrs at 71C before testing.

Solvent Resistance Acetone 1hr	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Acetone 1hr		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Acetone 1month	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Acetone 1mo		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Isopropyl Alcohol 1hr	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Isopropyl Alcohol 1hr		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Isopropyl Alcohol 1month	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Isopropyl Alcohol 1mo		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Freon TF 1hr	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Freon TF 1hr		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Freon TF 1month	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Freon TF 1mo		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Freon TMC 1hr	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Freon TMC 1hr		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance Freon TMC 1month	B	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + Freon TMC 1mo		
Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.		
Solvent Resistance 1, 1, 1 - Trichloroethane 1hour	A	<a href="#">View</a> 
Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + 1, 1, 1 - Trichloroethane 1hr		

Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.

Solvent Resistance 1, 1, 1 - Trichloroethane 1month	A	<a href="#">View</a> 
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Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + 1, 1, 1 - Trichloroethane 1mo

Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.

Solvent Resistance RMA Flux 1hr	A	<a href="#">View</a> 
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Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + RMA Flux 1hr

Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.

Solvent Resistance RMA Flux 1month	A	<a href="#">View</a> 
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Environmental Condition: 24hr @ RT + 2hr @ 160F(71C) + RMA Flux 1mo


Notes: Cured OLS samples immersed in solvent and after dwell, examined for surface attack compared to control. A: Unaffected, no color or texture change B: Slight attack, slight swelling of surface. C: Moderate/severe attack, extreme swelling of surface.

## Electrical and Thermal Properties

Property	Values	Additional Information
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Glass Transition Temperature (Tg)	15 °C	<a href="#">View</a> 
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Notes: Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 68°F (20°C) per minute. Second heat values given.

Glass Transition Temperature (Tg)	59 °F	<a href="#">View</a> 
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Notes: Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 68°F (20°C) per minute. Second heat values given.

Glass Transition Temperature (Tg)	8 °C	<a href="#">View</a> 
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Notes: Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 68°F (20°C) per minute. Second heat values given.


Glass Transition Temperature (Tg)	46 °F	<a href="#">View</a> 
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Notes: Glass Transition Temperature (Tg) determined using DSC Analyzer with a heating rate of 68°F (20°C) per minute. Second heat values given.

Dielectric Constant 1KHz	9.2	<a href="#">View</a> 
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Test Method: ASTM D150

Temp C: 23C  
Temp F: 72F

Dissipation Factor 1KHz	0.22	<a href="#">View</a> 
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Test Method: ASTM D150



Temp C: 23C  
Temp F: 72F

Thermal Conductivity 0.35 x 10<sup>-3</sup> Cal/s/cm/°C View 

Test Method: C177

Temp F: 110F


Notes: Thermal conductivity determined using C-matic Instrument using 2 in. diameter samples.

Thermal Conductivity 14.7 W/m/K View 

Test Method: C177

Temp F: 110F


Notes: Thermal conductivity determined using C-matic Instrument using 2 in. diameter samples.

Thermal Conductivity 0.085 (btu-ft)/(h-ft<sup>2</sup>-°F) View 

Test Method: C177


Temp F: 110F

Notes: Thermal conductivity determined using C-matic Instrument using 2 in. diameter samples.

Volume Resistivity 1.5 x 10<sup>10</sup> Ω-cm View 

Test Method: ASTM D257

Temp C: 23C  
Temp F: 73F

Coefficient of Thermal Expansion 181 x 10<sup>-6</sup> m/m/°C View 

Notes: TCE determined using TMA Analyzer using a heating rate of 10°C per minute. Second heat values given.

## Storage and Shelf Life

Store 3M™ Scotch-Weld™ Epoxy Adhesive DP-105 Clear at 60-80°F (15-27°C) for maximum shelf life.

These epoxy adhesive products have a shelf life of 24 months in their unopened bulk containers. Shelf life is determined from the date of manufacture.

## Industry Specifications

[EN 45545 test report for details \(ISO 5659-2, ISO 9239-1, ISO 5660-1, ISO 5658-2\)](#)

## Bottom Matter

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## Trademarks

3M, Scotch-Weld, Novec and EPX are trademarks of 3M Company.

## Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

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## Handling/Application Information

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### Directions for Use

1. For high strength structural bonds, paint, oxide films, oils, dust, mold release agents and all other surface contaminants must be completely removed. However, the amount of surface preparation directly depends on the required bond strength and the environmental aging resistance desired by user. For specific surface preparations on common substrates, see the following section on Surface Preparation.
2. Uses gloves to minimize skin contact. Do not use solvents for cleaning hands.
3. Mixing

### For Duo-Pak Cartridges

3M™ Scotch-Weld™ Epoxy Adhesive DP105 Clear is supplied in a dual syringe plastic Duo-Pak cartridge as part of the 3M™ Scotch-Weld™ EPX™ Applicator system. To use, simply insert the Duo-Pak cartridge into the EPX applicator and start the plunger into the cylinders using light pressure on the trigger. Next, remove the Duo-Pak cartridge cap and expel a small amount of adhesive to be sure both sides of the Duo-Pak cartridge are flowing evenly and freely. If automatic mixing of Part A and Part B is desired, attach the EPX mixing nozzle to the Duo-Pak cartridge and begin dispensing the adhesives. For hand mixing, expel the desired amount of adhesive and mix thoroughly. Mix approximately 15 seconds after uniform color is obtained.

### For Bulk Containers

Mix thoroughly by weight or volume in the proportions specified in the Typical Uncured Properties section. Mix approximately 15 seconds after uniform color is obtained.

4. For maximum bond strength apply adhesive evenly to both surfaces to be joined.
5. Application to the substrates should be made within 3 minutes. Larger quantities and/or higher temperatures will reduce this working time.
6. Join the adhesive coated surfaces and allow to cure at 60°F (16°C) or above until completely firm. Heat up to 200°F (93°C), will speed curing. These products will cure in 48 hours @ 75°F (24°C).
7. Keep parts from moving during cure. Contact pressure is necessary. Maximum shear strength is obtained with a 3-5 mil bond line.
8. Excess uncured adhesive can be cleaned up with ketone type solvents.\*

Adhesive Coverage: A 0.005 in. thick bondline will yield a coverage of 320 sqft/ gallon.

\*Note: When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.

### Surface Preparation

For high strength structural bonds, paint, oxide films, oils, dust, mold release agents and all other surface contaminants must be completely removed. However, the amount of surface preparation directly depends on the required bond strength and the environmental aging resistance desired by the user.

The following cleaning methods are suggested for common surfaces:

#### Steel:

1. Wipe free of dust with oil-free solvent such as acetone, isopropyl or alcohol solvents.\*
2. Sandblast or abrade using clean fine grit abrasives.

3. Wipe again with solvent to remove loose particles.
4. If a primer is used, it should be applied within 4 hours after surface preparation.

Aluminum:

1. Vapor Degrease: 3M™ Novec™ condensing vapors for 5-10 minutes.
2. Alkaline Degrease: Oakite 164 solution (9-11 oz./gallon water) at 190°F ± 10°F (88°C ± 5°C) for 10-20 minutes. Rinse immediately in large quantities of cold running water.
3. Acid Etch: Place panels in the following solution for 10 minutes at 150°F ± 5°F (66°C ± 2°C).

Sodium Dichromate 4.1 - 4.9 oz./gallon

Sulfuric Acid, 66°Be 38.5 - 41.5 oz./gallon 2024-T3 aluminum (dissolved) 0.2 oz./gallon minimum Tap Water as needed to balance

4. Rinse: Rinse panels in clean running tap water.
5. Dry: Air dry 15 minutes; force dry 10 minutes at 150°F ± 10°F (66°C ± 5°C).
6. If primer is to be used, it should be applied within 4 hours after surface preparation.

Plastics/Rubber:

1. Wipe with isopropyl alcohol.\*
2. Abrade using fine grit abrasives.
3. Wipe with isopropyl alcohol.\*

Glass:

1. Solvent wipe surface using acetone or MEK.\*

\*Note: When using solvents, extinguish all ignition sources and follow the manufacturer's precautions and directions for use.

- For small or intermittent applications the 3M™ Scotch-Weld™ EPX™ Applicator is a convenient method of application.
- For larger applications, these products may be applied by use of flow equipment.
- Two part meter/mixing/dispensing equipment is available for intermittent or production line use. These systems may be desirable because of their variable shot size and flow rate characteristics and are adaptable to many applications.

## References

Property	Values
3m.com Product Page	<a href="https://www.3m.com/3M/en_US/p/d/b40066495/">https://www.3m.com/3M/en_US/p/d/b40066495/</a>
Safety Data Sheet SDS	<a href="https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=DP105 Clear">https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&amp;msdsLocale=en_US&amp;co=ptn&amp;q=DP105 Clear</a>

## Family Group

Link Tags:

- DP105 Clear

Products	Open Time	Color	Worklife	Set Time (min)	Time to Full Cure	Shore D Hardness
DP105 Clear	5 min	Clear	3 to 4 min	20 min	48 hr	27

## ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

## Precautionary Information

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Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

## Information

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