

# 3M

# Scotch-Weld™

## Control Joint Sealant

### DP-5106, Self-Leveling, Gray

#### Technical Data

July, 2006

---

**Product Description** 3M™ Scotch-Weld™ Control Joint Sealant DP-5106 is a self-leveling, gray, rapid setting, two-component polyurethane. It is packaged as 1:1 ratio liquids in duo-pak cartridges. With the squeeze of the trigger, the components are automatically mixed and easily dispensed as bubble-free, self-leveling liquids.

---

**Suggested Applications:** • For stress-relieving large segments of concrete floors

**Building & Construction**

**Maintenance & Repair**

**Pool Maintenance & Repair**

---

**Typical Properties**

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

Test	Conditions	Test Method	Properties
Viscosity of Mixture	77°F (25°C)	HBDVI + CP	34,325 cps
Work Life	10 g, 1/4" thick @ 77°F (25°C)	PEC	4 minutes
Tack-free Time	10 g, 1/4" thick @ 77°F (25°C)	PEC	30 minutes
Full Cure Time	10 g, 1/4" thick @ 77°F (25°C)	PEC	24 hours
Hardness After Full Cure	24 hours @ 77°F (25°C)	ASTM D2240-91	85 Shore A
Lap Shear Strength	7 days @ 77°F (25°C)	ASTM D1002-72	1,100 psi
Temperature Range	Continuous	PEC	-60°F (-51°C) to 250°F (121°C)

**3M**  
**Scotch-Weld™**  
**Control Joint Sealant**  
DP-5106, Self-Leveling, Gray

**Installation**

**Building & Construction  
Maintenance & Repair**

**Pool Maintenance &  
Repair**

**3M™ SCOTCH-WELD™ CONTROL JOINT SEALANT**

**Section 1: Preparation**

**General Preparation of the Control Joint Channel:**

1. For existing control joints, removing all loose aggregate, dust, old caulk, grease or other compounds from the control joint saw cut.
2. For new control joints, prepare control joint cavities by making saw cuts 1/4-inch wide by 1/2-inch deep using an abrasive-resistant saw cut blade. Usually the placement of channels for these joints is described by the contractor. Typically control joint channels span 12 to 20 feet square areas.
3. Use a bristle brush to remove the major debris. Then use moisture-free and oil-free compressed air to blow out the fine dust.
4. If desired, mask off the areas surrounding the control joint for creating a well-defined and aesthetic appearance to the channel.

**Section 2. Procedures**

**General Preparation of the Dual Cartridge/Dispenser/Mixer Tip Assembly:**

1. Select the cartridge size required for the job.
2. Refer to the table below to determine how many feet of channel are filled for each cartridge size, channel width and channel depth.

Crack Width	Crack Depth	Linear ft. per 1.7 fl. oz.	Linear ft. per 12 fl. oz.	Linear ft. per gallon
1/4 in.	1/4 in.	3.9	28	297
1/2 in.	1/4 in.	2	14	148
3/4 in.	1/4 in.	1.3	9	95
1 in.	1/4 in.	1	7	74
1/4 in.	1/2 in.	2	14	148
1/2 in.	1/2 in.	1	7	74
3/4 in.	1/2 in.	0.6	4	42
1 in.	1/2 in.	0.4	3	32

3. Select the desired manual or pneumatic dispenser
4. Select the mix tip.
5. Prepare the required number of cartridges.
6. Cut the blind-end off of the cartridge orifice, or remove the cap.
7. Place the cartridge in the dispenser.
8. Dispense just enough material so that both components dispense equally.
9. Assemble the mix tip onto the cartridge.

**3M**  
**Scotch-Weld™**  
**Control Joint Sealant**  
DP-5106, Self-Leveling, Gray

---

**Installation**  
*(continued)*

**General Procedure for Filling the Control Joints**

1. Embed the mixer tip at the deepest portion of the channel and dispense into the prepared channel.
2. Fill so the sealant comes level with the concrete surface elevation.
3. 3M™ Scotch-Weld™ Control Joint Sealant DP-5106 will self-level and leave a slight meniscus.
4. If desired, one can create a joint flush and level to the concrete floor by overlaying plastic release film and applying pressure to level the liquid.
5. A plastic spreader can also be used to spread the liquid level to the concrete floor prior to the set of Scotch-Weld control joint sealant DP-5106.
6. Scotch-Weld control joint sealant DP-5106 will set within approximately 5 to 15 minutes.
7. At 75°F (24°C), a 1/4"-thick section sets and becomes tack-free within 30 minutes and will cure within 24 hours. **Note:** Thicker masses or substrates at higher temperature take less time to cure. Thinner masses or substrates at lower temperature take more time to cure.

**Section 3: Clean-up and Finishing**

1. Remove the masking tape surrounding the control joint channels.
2. If desired, grind the cured product with 36 to 50 grit sanding disks or sandpaper to take off any rough edges and achieve the desire shape. Sand with finer grit sandpaper to the desired finish.



**Scotch-Weld™**

**Control Joint Sealant**

**DP-5106, Self-Leveling, Gray**

---

**Storage** This product has a shelf life of 6 months when properly stored in unopened packages at temperatures of 65°F to 85°F (18°C to 30°C). Do not expose to excessive cold or moisture.

---

**Maintenance** No maintenance is required. However, if joints become damaged, simply reapply 3M™ Scotch-Weld™ Control Joint Sealant DP-5106.

---

**Precautionary Information** Refer to Product Label and Material Safety Data Sheet (MSDS) for health and safety information before using this product. For environmental information, refer to MSDS. Always wear gloves, eye protection, appropriate respiratory protection, and work in a well-ventilated area. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

---

**Product Use** All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

---

**Warranty and Limited Remedy** Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. **3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE.** User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

---

**Limitation of Liability** Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

**ISO 9001:2000**

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001:2000 standards.



**Industrial Business**

**Industrial Adhesives and Tapes Division**

3M Center, Building 21-1W-10, 900 Bush Avenue  
St. Paul, MN 55144-1000  
800-362-3550 • 877-369-2923 (fax)  
www.3M.com/industrial



*Recycled Paper*  
40% pre-consumer  
10% post-consumer

3M and Scotch-Weld are trademarks of 3M.  
Printed in U.S.A.  
©3M 2006 78-9236-7099-2 (7/06)