



**POLYCOAT  
PRODUCTS**  
A Division of American Polymers Corp.

**POLY-CAULK® 80**  
*100% Solids Self-Leveling  
Polyurea Caulking Compound  
Technical Data Sheet*

**DESCRIPTION**

Poly-Caulk® 80 is a two-component aromatic, 1:1 ratio, rapid setting, self leveling, 100% solids polyurea caulking compound for interior and exterior horizontal application.

**FEATURES**

- ❖ 100% Solids
- ❖ Down Time 30-90 minutes
- ❖ Meets USDA Criteria
- ❖ Remains Flexible, Even In Cold Temperatures
- ❖ Meets California VOC and AQMD Requirements
- ❖ Flexible
- ❖ Odorless
- ❖ Non-Toxic

**USES**

Poly-Caulk® 80 is used on interior and exterior horizontal concrete surfaces, to repair random cracks, control joints, and other areas where down time is limited.

- ❖ Food Processing Plants
- ❖ Bridge Headers
- ❖ Freezers and Cold Storage
- ❖ Waste Water Treatment Plants
- ❖ Parking Garage Decks
- ❖ Industrial/Manufacturing Facilities
- ❖ Warehouses
- ❖ Airports
- ❖ Spalls
- ❖ Truck Aprons
- ❖ Grade Matching
- ❖ Saw/Utility Cuts

**COLORS**

Concrete Grey  
Note: Poly-Caulk® 80 will discolor in exterior applications.

**PACKAGING**

10 gallon kit: One 5 gallon pail of Side-A and One 5 gallon pail of Side-B.

100 gallon kit: One 55 gallon drum (net 50 gallons) of Side-A and One 55 gallon drum (net 50 gallons) of Side-B.

**COVERAGERATESLF/Gallon**

		Width of Joint						
		¼"	⅜"	½"	⅝"	¾"	⅞"	1"
Depth of Joint	¼"	308	205	154	123	102	88	77
	⅜"	205	136	102	82	68	58	51
	½"	154	102	77	61	51	44	38
	⅝"	123	82	61	49	41	35	30
	¾"	102	68	51	41	34	29	25
	⅞"	88	58	44	36	29	25	22
	1"	77	51	38	30	25	22	19

Coverages and yields shown do not include allowances for loss or waste and variations in job conditions. Each user must establish their own factors for loss from experience.

**TECHNICAL DATA (Based on draw down film)**

Mix Ratio by Volume	1A : 1B
Specific Gravity,	
Part-A	1.16
Part-B	1.01
Viscosity at 75°F (24°C),	
Part-A	430 cps
Part-B	550 cps
Gel Time at 75°F (24°C), ASTM D-2471	50 seconds
Hardness, ASTM D-2240	80 ± 2 Shore A
Tensile Strength, ASTM D-412	1500 ± 200 psi
	10.3 ± 1.4 MPa
Elongation, ASTM D-412	300 ± 50%
Tear Strength, ASTM D-624	275 ± 50 pli
	48.2 ± 8.8 kN/m
Total Solids by Weight, ASTM D-2369	95%
Total Solids by Volume, ASTM D-2697	95%
Volatile Organic Compounds, (Part-A & B combined)	
ASTM D-2369-81	0.75 lbs/gal
	90 gm/liter

**SURFACE PREPARATION**

Allow concrete to cure 28 days before installation.

Saw cut the joint to ACI Recommendations.

All joints must be clean and dry prior to installing Poly-Caulk® 80.

If joint is damp, dry with heat torch.

If primer is required, use Polyprime 2180 or Polyprime EBF.

Remove all dust from the concrete pores prior to installing Poly-Caulk® 80.

If backer rod is used in control joints, the recommended depth is not greater than 25% of the total depth of the slab.

Construction joints are to be filled to full depth using no backer rod or silica sand.

To repair T-joints, the joint should be cut a minimum of 25% of the total depth of the slab. The side of the T-joint must be cut 1½" from the joint and a minimum of ½" deep.

For random crack and spall repairs, each side of the crack should be cut to create a minimum ½" deep vertical edge.

Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges.

**MIXING**

Poly-Caulk® 80 may not be diluted under any circumstance.

Side-A material requires no mixing. Pre-mix side-B material before application using a mechanical mixer at a low speed. Mix until homogeneous mixture and color is obtained.

Use only a proportioning dispensing system which transfers, meters and mixes the side-A and side-B components at the desired rate and at the required proportion of 1:1 by volume.

### **APPLICATION**

For best results, machine dispense using a 1:1 ratio pump, with or without heater as required. Use static mixing tube with restrictor before dispensing. Material left in static mixing tube will thicken in approximately 30-60 seconds and mixing tube needs to be discarded at that point.

This material can be applied at environmental temperatures from 20°F (-6.6°C) to as high as 135°F (57°C).

The product needs to be conditioned at 75-80°F prior to use.

This material may be used to fill the entire crack/joint. Excess/overflow material from joints should be shaved off in about 60 to 90 minutes after application.

### **FINISHING**

Slice off any overpour flush to grade.

Open to traffic once Poly-Caulk® 80 has set.

Surface can be utilized to light traffic typically within 90 minutes of application.

### **CLEANUP**

Cured product may be disposed of without restriction. Mix excess A and B material and allow to cure. Check local, state and federal laws before disposing of material.

### **STORAGE**

Poly-Caulk® 80 should be stored at 60-95°F (15-35°C).

Poly-Caulk® 80 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

### **LIMITATIONS**

Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling.

Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

### **WARNING**

This product contains Isocyanates and Curatives.

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*Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.*

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