



PROSOCO®

# Enviro Klean®

NEXT GENERATION CLEANERS

## 2010 All Surface Cleaner®

Enviro Klean® 2010 All Surface Cleaner® is a next-generation product for cleaning and degreasing light-to-heavily soiled stone, tile, masonry and much more. Powerful enough for industrial use, flexible enough for jobs around the home, space-saving EK 2010 replaces a host of individual cleaning agents. It's concentrated for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces. It's dilutable for home-use on windows, bathroom tub and tile, counter tops and more.

Easy-to-use EK 2010 All Surface Cleaner® is water-rinsable and contains no harsh acids, caustics or solvents. EK 2010 also removes Sure Klean® Weather Seal Siloxane PD over spray from windows.

### ADVANTAGES

- Cleans and degreases light-to-heavily soiled stone, tile, masonry and much more.
- Effectively removes moderate biological staining.
- Dilutable for jobs around the home.
- Replaces a host of individual cleaning agents.
- Effective cleaner for windows, bathroom tub and tile, counter tops and more.
- Easy-to-use and water-rinsable.
- Contains no harsh acids, caustics or solvents.

### Limitation

- Repeated use may dull polished carbonate surfaces, including but not limited to limestone, marble and travertine.

### REGULATORY COMPLIANCE

#### VOC Compliance

Enviro Klean® 2010 All Surface Cleaner® is compliant with all national, state and district VOC regulations.

### TYPICAL TECHNICAL DATA

FORM	Clear, green liquid Fresh odor
SPECIFIC GRAVITY	1.070
pH	10.5 7.8-8.2 Typical Rinse water
WT/GAL	8.90 lbs
ACTIVE CONTENT	not applicable
TOTAL SOLIDS	not applicable
VOC CONTENT	not applicable
FLASH POINT	>200° F (>93° C) ASTM D 3278
FREEZE POINT	32° F (0° C)
SHELF LIFE	3 years in tightly sealed, unopened container

### SAFETY INFORMATION

Always read full label and SDS for precautionary instructions before use. Use appropriate safety equipment and job site controls during application and handling.

24-Hour Emergency Information:  
INFOTRAC at 800-535-5053

# Product Data Sheet

## Enviro Klean® 2010 All Surface Cleaner®

### PREPARATION

Before use, test all substrates not intended to be treated with 2010 All Surface Cleaner®. If testing indicates adverse effects, the substrate must be protected before full scale application.

Best practices are to protect people, vehicles, property, plants and all surfaces not set for cleaning from the product, splash, rinse, residue, fumes and wind drift. Rinse non target materials with large quantities of water. Grass and plantings may be protected with sprinklers.

Divert pedestrian and auto traffic if necessary. Best practices are to clean when traffic is at a minimum.

### Surface and Air Temperatures

Best air and surface temperatures for cleaning are 50°F (10°C) or above. Cleaning when temperatures are below freezing or will be overnight may harm masonry. If freezing conditions exist before application, let masonry thaw.

### Equipment

Apply with low-pressure sprayer, brush or heavy nap roller. Scrub heavily soiled surfaces with a nonabrasive brush or synthetic scrubbing pad.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Masonry-washing equipment generating 400–1000 psi with a water flow rate of 6–8 gpm is the best water/pressure combination for rinsing porous masonry. Use a 15–45° fan spray tip. Heated water (150–180°F; 65–82°C) may improve cleaning efficiency.

Use adjustable equipment for reducing water flow rates and rinsing pressure for sensitive surfaces. Rinsing pressures greater than 1000 psi and fan spray tips smaller than 15° may permanently damage sensitive masonry. Water flow rates less than 6 gpm may reduce cleaning productivity and contribute to uneven cleaning results.

### Storage and Handling

Store in a cool, dry place. Always seal container after dispensing. Do not alter or mix with other chemicals. Published shelf life assumes upright storage of factory-sealed containers in a dry place. Maintain temperature of 45–100°F (7–38°C). If product freezes, allow to thaw and mix well. Do not double stack pallets. Dispose of in accordance with local, state and federal regulations.

### APPLICATION

Read "Preparation" and the Safety Data Sheet before use.

**ALWAYS TEST** a small area of each surface to confirm suitability, coverage rate and desired results before beginning overall application. Test with the same equipment, recommended surface preparation and application procedures planned for general application. Let surface dry thoroughly before inspection.

Recommended for these substrates. Always test. Coverage is in sq.ft./m. per gallon of concentrate.

Substrate	Type	Use?	Coverage
Architectural Concrete Block	Burnished	yes	50–150 sq.ft. 5–14 sq.m.
	Smooth	yes	
	Split-faced	yes	
	Ribbed	yes	
Concrete	Brick	yes	50–150 sq.ft. 5–14 sq.m.
	Tile	yes	
	Precast Panels	yes	
	Pavers	yes	
	Cast-in-place	yes	
Fired Clay	Brick	yes	150–500 sq.ft. 14–46 sq.m.
	Tile	yes	
	Terra Cotta	yes	
	Pavers	yes	
Marble, Travertine, Limestone	Polished	yes	500–1000 sq.ft. 46–93 sq.m.
	Unpolished	yes	150–500 sq.ft. 14–46 sq.m.
Granite	Polished	yes	500–1000 sq.ft. 46–93 sq.m.
	Unpolished	yes	150–500 sq.ft. 14–46 sq.m.
Sandstone	Unpolished	yes	150–500 sq.ft. 14–46 sq.m.
Slate	Unpolished	yes	150–500 sq.ft. 14–46 sq.m.
Always test to ensure desired results. Coverage estimates depend on surface texture and porosity.			

# Product Data Sheet

## Enviro Klean® 2010 All Surface Cleaner®

### Dilution & Mixing

When removing heavy soiling, use in concentrate.

When used as a light-duty cleaner, dilute up to 1 part cleaner to 10 parts clean water.

### Application Instructions

1. Working from the bottom to the top, prewet the surface with clean water.
2. Apply the appropriately diluted solution to the masonry surface using a brush or low-pressure spray.
3. Let the cleaner stay on the surface 1–10 minutes, based on testing. Gently scrub heavily soiled areas.

*NOTE:* Do not let EK 2010 dry on the surface. If drying occurs, lightly wet surfaces with fresh water and reapply the cleaner in a gentle scrubbing manner.

4. Working from the bottom to the top, rinse the surface thoroughly with clean water.
5. Repeat steps 1 through 4 if necessary.

### Cleanup

Clean tools and equipment using fresh water.

### WARRANTY

The information and recommendations made are based on our own research and the research of others, and are believed to be accurate. However, no guarantee of their accuracy is made because we cannot cover every possible application of our products, nor anticipate every variation encountered in masonry surfaces, job conditions and methods used. The purchasers shall make their own tests to determine the suitability of such products for a particular purpose.

PROSOCO, Inc. warrants this product to be free from defects. **Where permitted by law, PROSOCO makes no other warranties with respect to this product, express or implied, including without limitation the implied warranties of merchantability or fitness for particular purpose.** The purchaser shall be responsible to make his own tests to determine the suitability of this product for his particular purpose. PROSOCO's liability shall be limited in all events to supplying sufficient product to re-treat the specific areas to which defective product has been applied. Acceptance and use of this product absolves PROSOCO from any other liability, from whatever source, including liability for incidental, consequential or resultant damages whether due to breach of warranty, negligence or strict liability. This warranty may not be modified or extended by representatives of PROSOCO, its distributors or dealers.

### CUSTOMER CARE

Factory personnel are available for product, environment and job-safety assistance with no obligation. Call 800-255-4255 and ask for Customer Care – technical support.

Factory-trained representatives are established in principal cities throughout the continental United States. Call Customer Care at 800-255-4255, or visit our web site at [www.prosoco.com](http://www.prosoco.com), for the name of the PROSOCO representative in your area.

### BEST PRACTICES

Apply with low-pressure sprayer, brush or heavy nap roller. Scrub heavily soiled surfaces with a nonabrasive brush or synthetic scrubbing pad.

Rinse with enough water and pressure to flush spent cleaner and dissolved soiling from the masonry surface and surface pores without damage. Masonry-washing equipment generating 400–1000 psi with a water flow rate of 6–8 gpm is the best water/pressure combination for rinsing porous masonry. Use a 15–45° fan spray tip. Heated water may improve cleaning efficiency.

Do not let EK 2010 dry on the surface. If drying occurs, lightly wet surfaces with fresh water and reapply the cleaner in a gentle scrubbing manner.

Repeated use may dull polished carbonate surfaces, including but not limited to limestone, marble and travertine.

Never go it alone. If you have problems or questions, contact your local PROSOCO distributor or field representative. Or call PROSOCO technical Customer Care, toll-free, at 800-255-4255.



The Chemical Company

PRODUCT DATA

7 07 92 00 Joint Sealants

# CLOSED-CELL BACKER-ROD AND SOFT BACKER-ROD

Joint filler and backing material for Sonneborn® sealants

### Description

Sonolastic® Closed-Cell Backer-Rod is a closed-cell, polyethylene foam joint-filler and backing for elastomeric sealants. Its resilience accommodates dynamic joints. Sonolastic® Soft Backer-Rod is a reticulated closed-cell polyethylene foam joint-filler and backing for sealants. It compresses easily to accommodating joints of varying widths.

#### CLOSED-CELL BACKER-ROD

##### Yield

See page 3 for chart.

##### Packaging

Sizes 1/4 – 1-1/4" (6 – 32 mm) are wound on reels and packaged in cartons, weighing about 15 lbs (6.8 kg) per carton.

The 1-1/2 – 4" (38 – 102 mm) sizes are packaged in 7 ft (2.1 m) lengths and packaged in cartons, weighing about 35 lbs (15.89 kg) per carton.

##### Color

Gray

### Features

#### CLOSED-CELL BACKER-ROD

- Closed-cell polyethylene foam
- Lightweight
- Resilient
- Nonimpregnated, nonstaining, and nonbleeding
- Inert
- Round
- Nonadhering to sealants

#### SOFT BACKER-ROD

- Nongassing when punctured
- Reticulated closed-cell polyethylene foam
- Nonimpregnated, nonstaining, and nonbleeding
- Highly resilient
- Nonadhering to sealants

### Benefits

- Low moisture absorption
- Installs easily and quickly
- Accepts joint movement
- Will not discolor sealants or substrates
- Compatible with cold-applied sealants
- Gives proper shape to sealant for effective function
- Requires no additional bondbreaker

- Eliminates bubbling of sealant
- Low moisture absorption
- Will not discolor sealants or substrates
- Conforms to irregular joints; installs easily and quickly
- Requires no additional bondbreaker

#### SOFT BACKER-ROD

##### Yield

See page 3 for chart.

##### Packaging

Sizes 3/8 – 1-1/8" (10 – 29 mm) are wound on reels and packaged in cartons, weighing about 15 lbs (6.8 kg) per carton.

The 1-1/2 – 4" (38 – 102 mm) sizes are packaged in 6 ft (1.8 m) lengths and packaged in cartons, weighing about 18 lbs (8.1 kg) per carton.

##### Color

Gray

### Where to Use

#### APPLICATION

- Backing for sealants
- Precast panel joints
- Expansion joints
- Window-and door-frame perimeters
- Coping joints
- Glazing joints
- Isolation joints
- Control joints



## Technical Data

### CLOSED-CELL BACKER-ROD

#### Composition

Closed-Cell Backer-Rod is closed-cell polyethylene foam.

#### Compliances

- ASTM C 1330, Type C

### SOFT BACKER-ROD

#### Composition

Soft Backer-Rod is reticulated polyethylene foam with a continuous outer skin.

#### Compliances

- ASTM C 1330, Type B

## Test Data

### CLOSED-CELL BACKER-ROD

PROPERTY	RESULTS	TEST METHODS
Water absorption, oz/in <sup>3</sup> (g/cc)	< 0.017 (< 0.03)	ASTM C 1016
Density, lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	1.50 – 3.0 (24 – 48)	ASTM D 1622
Compression recovery, %	> 90	ASTM D 5249
Compression deflection, psi (KPa)	> 2.97 (>20.5)	ASTM D 5249
Tensile strength, psi (KPa)	> 29.0 (>200)	ASTM D 1623
Service temperature, ° F (° C)	-45 to 160 (-43 to 71)	

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

### SOFT BACKER-ROD

PROPERTY	RESULTS	TEST METHODS
Water absorption, oz/in <sup>3</sup> (g/cc)	0.058 (0.10)	ASTM C 1016
Density, lb/ft <sup>3</sup> (kg/m <sup>3</sup> )	1.50 – 3.0 (24 – 48)	ASTM D 1622
Compression recovery, %	> 90	ASTM D 5249
Compression deflection, psi (KPa)	> 2.97 (> 20.5)	ASTM D 5249
Tensile strength, psi (Kpa)	> 29.0 (> 200)	ASTM D 1623
Service temperature, ° F (° C)	-45 to 160 (-43 to 71)	

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

## How to Apply

### Application

1. Joint fillers have three major functions:
  - to control the depth of the sealant in proper relation to joint width
  - to provide a backing against which the sealant is applied, forcing the sealant to the sides of the joint
  - to prevent 3-sided bonding, ensuring proper functioning of the joint sealant
2. To install, compress backer-rod into the joint before sealants are applied.
3. Install backer-rod using a blunt probe or a plain-faced roller to force the rod to the desired depth.
4. A template or roller gauge may be used to control the depth at which the rod is placed.
5. DO NOT stretch backer-rod during installation but gently force into the joint so that the backer-rod fits tight against the sides of the joint.

### Appropriate Backer-Rod Size

#### SIZING CLOSED-CELL BACKER-ROD

1. For joint widths up to 3/4" (19 mm), the diameter of the rod should be 1/8" (3 mm) larger than the width of the joint.
2. For 3/4" (19 mm) wide joints, use 1" (25 mm) diameter rod.

#### SIZING SOFT BACKER-ROD

Select a backer-rod diameter that is approximately 25% larger than the width of the joint.

See the yield table on the next page for both Closed-Cell and Soft Backer-Rods.

### Joint sealing

1. Follow suggestions for joint-sealant application as directed by sealant manufacturer.
2. Where priming of the joint is necessary, primer should be applied only to the joint surfaces and allowed to dry before Backer-Rod is placed. DO NOT prime Backer-Rod.

### For Best Performance

- Do not puncture, fold, stretch, or crease Closed-Cell Backer-Rod.
- Follow sealant manufacturer's suggestions for joint sealant width-to-depth ratio.
- Do not use with hot applied sealants.
- For joints subject to puncture by high heels or umbrella points, a stiffer or higher density backup material is required. Cork or non-impregnated cane-fiber joint fillers are suitable. Separate materials from the sealant by a nonadhering, bondbreaker (polyethylene tape).
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

**Yield**

ESTIMATING CLOSED-CELL BACKER-ROD REQUIREMENTS

ROD DIAMETER IN (MM)	LINEAR FT PER CARTON (METERS PER CARTON)
1/4 (6)	6,400 (1,951)*
3/8 (10)	3,600 (1,097)**
1/2 (13)	2,500 (762)
5/8 (16)	1,550 (472)
3/4 (19)	1,100 (335)
1 (25)	550 (168)
1-1/4 (32)	400 (122)
1-1/2 (38)	552 (168)***
2 (51)	360 (110)***
2-1/2 (64)	240 (73)***
3 (76)	144 (43.9)***
4 (102)	90 (27.4)***

\* Supplied as two 3,200 ft (975 m) reels

\*\* Supplied as two 1,800 ft (549 m) reels

\*\*\* Supplied as 7 ft (2.1 m) lengths

ESTIMATING SOFT BACKER-ROD REQUIREMENTS

ROD DIAMETER IN (MM)	LINEAR FT PER CARTON (METERS PER CARTON)
3/8 (10)	3,600 (1097.3)*
5/8 (16)	1,550 (472)
7/8 (22)	850 (259.1)
1-1/8 (29)	500 (152.4)
1-1/2 (38)	552 (168.2)**
2 (51)	360 (109.7)**
2-1/2 (64)	240 (73.2)**
3 (76)	144 (43.9)**
4 (102)	90 (27.4)**

\* Supplied as two 1,800 ft (549 m) reels

\*\* Supplied as 6 ft (1.8 m) lengths



The Chemical Company

Technical Data Guide

7 | 07 92 00  
Joint  
Sealants

# MasterSeal® NP 100™

High performance hybrid sealant

## PACKAGING

300 ml (10.1 fl oz) cartridges,  
30 cartridges per carton

## COLORS

White, Stone, Limestone, Black, Medium  
Bronze, Aluminum Gray, Tan, Off White,  
Special Bronze, Redwood Tan, Hunter  
Green, Buff and Anodized Aluminum

## YIELD

See page 3 for charts.

## STORAGE

Store in original, unopened containers  
in a cool, dry area. Protect unopened  
containers from heat and direct  
sunshine. Storing at elevated  
temperatures will reduce shelf life.

## SHELF LIFE

12 months when properly stored

## VOC CONTENT

0.24 lbs/gal or 29 g/L

## RELATED DOCUMENTS

- MasterSeal NP 100 SDS

## DESCRIPTION

MasterSeal NP 100 is formulated with unique BASF polymers that allow for versatile adhesion to a variety of substrates while accommodating high movement and providing long term durability. MasterSeal NP 100 is a high performance, low modulus, high movement, non-sag, fast curing, ready-to-use hybrid sealant. It combines the best qualities of organic and silicone sealants to keep moving joints weathertight.

## PRODUCT HIGHLIGHTS

- Superior adhesion to a variety of substrates resulting in a long term bond
- Low modulus, formulated for joint movement of  $\pm 50\%$
- Resists chalking, cracking and fading to maintain long lasting weathertight seals
- Compatible with elastomeric coatings and can be painted soon after installation
- Easy to gun and tool, which speeds up application and makes neater joints
- Fast curing helps to speed up jobsite production
- Wide temperature application range
- Non-staining formula for use on stone and other sensitive substrates
- Available in six standard colors
- Meets all State and Federal VOC regulations

## APPLICATIONS

- Vertical or horizontal
- Exterior or interior
- Above grade
- For sealing a variety of building joints against water and air intrusion
- Joints with extreme movement
- Store front systems
- Expansion joints
- Panel walls
- Precast units
- Aluminum, vinyl, and wood window frames
- Fascia
- Parapets
- Sanitary applications
- Roofing

## SUBSTRATES

- Kynar
- Stucco
- Aluminum
- Concrete
- Masonry
- Wood
- Stone
- Metal
- Vinyl
- Fiber cement siding

### Technical Data

#### Composition

MasterSeal NP 100 is a formulation based on hybrid technology.

#### Compliances

- ASTM C 920, Type S, Grade NS, Class 50, Use NT, M, A, and O\*\*
- capable of +100/-50% movement under typical field conditions.
- Federal Specification TT-S-001543A, Type II, Class A, Type Nonsag
- Federal Specification TT-S-00230C, Type II, Class A
- Corps of Engineers CRD-C-541, Type II, Class A
- USDA compliant for use in areas that handle meat and poultry

\* MasterSeal NP 100 not recommended for application on glass

\*\* Refer to substrates in Where to Use.

#### Typical Properties

PROPERTY	VALUE
Service temp range, ° F (° C)	-40 to 185 (-40 to 85)
Shrinkage	None

### Test Data

PROPERTY	RESULTS	TEST METHOD
<b>Movement capability, %</b>	± 50	ASTM C 719
<b>100% modulus, psi (MPa)</b>	40 – 50 (0.28 – 0.34)	ASTM D 412
<b>Tensile strength, psi (MPa)</b>	200 (1.38)	ASTM D 412
<b>Tear strength, lb/in (kg/cm)</b>	22 (3.90)	ASTM D 1004
<b>Ultimate elongation at break, %</b>	700 – 900	ASTM D 412
<b>Rheological, (sag in vertical displacement), at 120° F (49° C)</b>	No sag	ASTM C 639
<b>Extension rate, mL/min</b>	48.10	ASTM C 1183
<b>Hardness, Shore A, at standard conditions</b>	17 – 23	ASTM C 661
<b>Weight loss, after heat aging, %</b>	≤ 1	ASTM C 1246
<b>Tack-free time, hrs (maximum 72 hours)</b>	Pass 3 – 6 hrs	ASTM C 679
<b>Tack-free time by touch, min</b>	50 – 70	
<b>Stain and color change</b>	Passes (no visible stain)	ASTM C 510
<b>Bond durability,* pli on glass, aluminum, and concrete, ± 50% movement</b>	Passes	ASTM C 719
<b>Adhesion* in peel, pli (kg/cm), (minimum 5 pli [0.89 kg/cm])</b>		ASTM C 794
	Aluminum 20.32 (5.71)	
	Glass 21.33 (5.89)	
	Concrete 16.21 (3.75)	
<b>Adhesion in peel, pli (kg/cm), after UV radiation through glass, (minimum 5 pli [0.89 kg/cm])</b>	33 (5.89)	ASTM C 794
<b>Artificial weathering, Xenon arc, 2,000 hrs</b>	No Cracking	ASTM G 155

\*Concrete primed with MasterSeal P 179 for water immersion as indicated in ASTM C 920. Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

### HOW TO APPLY

#### JOINT PREPARATION

1. Design the number of joints and the joint width for a maximum of ±25% movement.
2. In optimum conditions, the depth of the sealant should be 1/2 the width of the joint. The sealant joint depth (measured at the center) should always fall between the maximum depth of 1/2 " and the minimum depth 1/4 ". Refer to Table 1.

3. In deep joints, control the sealant depth by installing Closed-Cell Backer-Rod or Soft Backer-Rod. Where the joint depth does not permit the use of backer-rod, use a bond breaker (polyethylene strip) to prevent three-sided adhesion.
4. To maintain the recommended sealant depth, install backer-rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed-Cell Backer-Rod should be

about 1/8" larger in diameter than the width of the joint to allow for compression. Soft Backer-Rod should be approximately 25% larger in diameter than the joint width. Because the sealant does not adhere to the backer-rod, no separate bond breaker is required. Do not prime or puncture the backer-rod.

TABLE 1  
**Joint Width and Sealant Depth**

JOINT WIDTH, IN (MM)	SEALANT DEPTH AT MIDPOINT, IN (MM)
1/4 – 1/2 (6 – 13)	1/4 (6)
1/2 – 3/4 (13 – 19)	1/4 – 3/8 (6 – 10)
3/4 – 1 (19 – 25)	3/8 – 1/2 (10 – 13)
1 – 1-1/2 (25 – 38)	1/2 (13)

**Yield**  
 LINEAR FEET PER GALLON\*

JOINT DEPTH (INCHES)	JOINT WIDTH (INCHES)						
	1/4	3/8	1/2	5/8	3/4	7/8	1
1/4	308	205	154	122	–	–	–
3/8	–	–	–	82	68	58	51
1/2	–	–	–	–	51	44	38

\* One gallon equals approximately 12 cartridges.

METERS PER LITER\*

JOINT DEPTH (MM)	JOINT WIDTH (MM)						
	1/4	3/8	1/2	5/8	3/4	7/8	1
6	24.8	16.5	12.4	9.8	–	–	–
10	–	–	–	6.6	5.5	4.7	4.1
13	–	–	–	–	4.1	3.5	3.0

\* One liter equals approximately 3.33 cartridges.

**SURFACE PREPARATION**

Substrates must be structurally sound, fully cured, dry and clean. Substrates should be free of the following: dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, membrane materials and sealant residue.

**CONCRETE, STONE, AND OTHER MASONRY**

Clean by grinding, sandblasting, or wire brushing to expose a sound surface free of contamination and laitance.

**METAL**

1. Remove scale, rust and loose coatings from metal to expose a bright surface.
2. Test all coatings on metal that cannot be removed to verify adhesion of sealant or to determine an appropriate primer.

**WOOD**

1. New and weathered wood must be clean, dry and sound.
2. Scrape away loose paint to bare wood.
3. Test all coatings on wood that cannot be removed to verify adhesion of sealant or to determine an appropriate primer.
4. For freshly treated wood; allow six months for weathering.

**PRIMING**

1. MasterSeal NP 100 is considered a non-priming sealant, but special circumstances or substrates may require a primer.
  - Porous materials subject to intermittent water immersion require priming. Use MasterSeal P 179.
  - Certain architectural metal finishes may require priming with MasterSeal P 733.
  - It is the user's responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during application. Refer to the technical data guides for MasterSeal P 179 and MasterSeal P 733.
2. Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces. Very porous surfaces may require a second coat of MasterSeal P 179; however, do not over apply.
3. Allow primer to dry before applying MasterSeal NP 100. Depending on temperature and humidity, primer will be tack free in 15 – 30 minutes. Priming and sealing must be done on the same work day.

#### APPLICATION

1. MasterSeal NP 100 comes ready to use. Apply using a professional grade caulking gun. Do not open cartridges, sausages, or pails until preparatory work has been completed.  
**NOTE:** MasterSeal NP 100 is not a structural sealant.
  2. Fill joints from the deepest point to the surface by holding an appropriately sized nozzle against the back of the joint.
  3. Dry tooling is recommended. Proper tooling results in the correct bead shape, neat joints and optimal adhesion.
  4. Best practices dictate that all caulking and sealing be done when temperatures are above 40° F (4° C) to avoid application to moisture-laden surfaces. Moisture on substrates will adversely affect adhesion. Application may proceed as low as 20° F (-6° C) if there is certainty that substrates are completely dry, free of frost, and clean as described under Surface Preparation.
- MasterSeal NP 100 can adhere to other residual sealants in restoration applications. For best results, always clean the joint as advised in the Surface Preparation section of this data guide. A product field adhesion test for MasterSeal NP 100 within the specific application is always recommended to confirm adhesion and suitability of the application.
  - MasterSeal NP 100 should not be used for continuous immersion in water. Contact Technical Services for recommendations.
  - Do not use MasterSeal P 179 on nonporous surfaces such as aluminum, steel, vinyl, or Kynar 500 based paints. Use MasterSeal P 733 on coated metals when testing dictates.
  - Lower temperatures and humidity will extend curing times.
  - MasterSeal NP 100 can be painted over after a thin film or skin forms on the surface.
  - Pursuant to accepted industry standards and practices, using rigid paints and/or coatings over flexible sealants can result in a loss of adhesion of the applied paint and/or coating, due to the potential movement of the sealant. However, should painting and/or coating be desired it is required that the applicator of the paint and/or coating conduct on-site testing to determine compatibility and adhesion.
  - Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

#### CLEAN UP

1. Immediately after use, clean equipment with Reducer 990 or xylene. Use proper precautions when handling solvents.
2. Remove cured sealant by cutting with a sharp-edged tool.
3. Remove thin films by abrading.

#### CURING TIME

The cure of MasterSeal NP 100 varies with temperature and humidity. The following times assume 75° F (24° C), 50% relative humidity, and a joint 1/2" (13 mm) in width by 1/4" (6 mm) in depth.

*Skins: within 1 hour*

*Full cure: approximately 1 week*

*Full adhesion development: 10 – 14 days*

#### FOR BEST PERFORMANCE

- In cold weather, store container at room temperature for at least 24 hours before using.
- Do not allow uncured MasterSeal NP 100 to come into contact with alcohol-based materials or solvents.
- MasterSeal NP 100 should not be applied adjacent to other uncured sealants and certain petroleum based products.

#### LIMITED WARRANTY NOTICE

BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of BASF. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. BASF reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.

#### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [buildingsystems.basf.com](http://buildingsystems.basf.com), e-mailing your request to [basfbscst@basf.com](mailto:basfbscst@basf.com) or calling 1(800)433-9517. Use only as directed.

**For medical emergencies only, call ChemTrec® 1(800)424-9300.**

## Dow Corning® 795 Silicone Building Sealant

### FEATURES & BENEFITS

- Suitable for most new construction and remedial sealing applications
- Versatile – high performance structural glazing and weather sealing from a single product
- Available in 13 standard colors; custom colors also available
- Excellent weatherability – virtually unaffected by sunlight, rain, snow, ozone and temperature extremes of -40°F (-40°C) to 300°F (149°C)
- Excellent unprimed adhesion to a wide variety of construction materials and building components, including anodized, alodined, most coated and many Kynar®<sup>1</sup>-painted aluminums<sup>2</sup>
- Ease of application – ready to use as supplied
- Ease of use – all-temperature gunnability, easy tooling and low-odor cure byproduct
- Meets global standards (Americas, Asia and Europe)

### COMPOSITION

- One-part, neutral-cure, RTV silicone sealant

Neutral, one-part silicone sealant

### APPLICATIONS

- Structural and nonstructural glazing
- Structural attachment of many panel systems
- Panel stiffener applications
- Weather sealing of most common construction materials including glass, aluminum, steel, painted metal, EIFS, granite and other stone, concrete, brick and plastics

### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Property	Unit	Result
<b>As Supplied</b>			
ASTM C 679	Tack-Free Time, 50% RH	hours	3
	Curing Time at 25°C (77°F) and 50% RH	days	7-14
	Full Adhesion	days	14-21
ASTM C 639	Flow, Sag or Slump	Inches (mm)	0.1 (2.54)
	Working Time	minutes	20-30
	VOC Content <sup>1</sup>	g/L	28
<b>As Cured-After 21 days at 25°C (77°F) and 50% RH</b>			
ASTM D 2240	Durometer Hardness, Shore A	points	35
ASTM C 794	Peel Strength	lb/in (kg/cm)	32 (5.7)
ASTM C 1135	Tension Adhesion Strength		
	At 25% extension	psi (MPa)	45 (0.310)
	At 50% extension	psi (MPa)	60 (0.414)
ASTM C 719	Joint Movement Capability	percent	±50
ASTM C 1248	Staining (granite, marble, limestone, brick and concrete)		None
<b>As Cured-After 21 days at 25°C (77°F) and 50% RH followed by 10,000 hours in a QUV weatherometer, ASTM G 53</b>			
ASTM C 1135	Tensile Adhesion Strength		
	At 25% extension	psi (MPa)	35 (0.241)
	At 50% extension	psi (MPa)	50 (0.345)

<sup>1</sup>Kynar is a trademark of Atofina Chemicals Inc.

<sup>2</sup>Contact your local Dow Corning Sales Application Engineer for specifics.

<sup>1</sup>Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please send your request to [product.inquiry@dowcorning.com](mailto:product.inquiry@dowcorning.com).

## DESCRIPTION

*Dow Corning*<sup>®</sup> 795 Silicone Building Sealant is a one-part, neutral-cure, architectural-grade sealant that easily extrudes in any weather and cures quickly at room temperature. This cold-applied, non-sagging silicone material cures to a medium- modulus silicone rubber upon exposure to atmospheric moisture. The cured sealant is durable and flexible enough to accommodate  $\pm 50$  percent movement of original joint dimension when installed in a properly designed weather seal joint. In a properly designed structurally glazed joint, the sealant is strong enough to support glass and other panel materials under high wind load.

## APPROVALS/ SPECIFICATIONS

*Dow Corning* 795 Silicone Building Sealant meets the requirements of:

- Federal Specification TT-S 001 543A (COM-NBS) Class A for silicone building sealants
- Federal Specification TT-S-00230C (COM-NBS) Class A for one- component building sealants
- ASTM Specification C 920 Type S, Grade NS, Class 50, Use NT, G, A and O
- ASTM Specification C 1184 for structural silicone sealants
- Canadian Specification CAN2-19.13- M82

## COLORS

*Dow Corning* 795 Silicone Building Sealant is available in 13 colors: white, limestone, champagne, natural stone, gray, black, bronze, sandstone, adobe tan, dusty rose, rustic brick, blue spruce, and charcoal. Custom colors may be ordered to match virtually any substrate.

## HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-the- art application methods and joint design. Please contact your local *Dow Corning* Sales Application Engineer for specific advice.

## Preparation

Clean all joints, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

## Application Method

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended. Apply *Dow Corning* 795 Silicone Building Sealant in a continuous operation using positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

## HANDLING

## PRECAUTIONS

**PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.**

## USABLE LIFE AND STORAGE

When stored at or below 27°C (80°F), *Dow Corning* 795 Silicone Building Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use By Date."

## PACKAGING INFORMATION

*Dow Corning* 795 Silicone Building Sealant is supplied in 10.3-fl oz (305-mL) disposable plastic cartridges that fit ordinary caulking guns, 20-fl oz (590- mL) sausages and 2- and 4.5-gal (7.5- and 17-L) bulk containers.

## LIMITATIONS

*Dow Corning* 795 Silicone Building Sealant should not be used:

- In structural applications without prior review and approval by your local *Dow Corning* Sales Application Engineer
- In below-grade applications
- When surface temperatures exceed 50°C (122°F) during installation
- On surfaces that are continuously immersed in water



**SEALANT • WATERPROOFING  
& RESTORATION INSTITUTE**

Issued to: *Dow Corning Corp.*<sup>®</sup>  
Product: 795 Silicone Building Sealant  
C719: Pass  Ext.+50% Comp:-50%

Substrate: Glass, Aluminum, Kynar  
*(Glass and Aluminum Substrates were tested unprimed;  
Dow Corning 1200 OS Primer used on Kynar substrates)*

C661: Rating 41  
Validation Date: 9/11/12 - 9/10/17  
No. 912-SBS917 Copyright © 2012

**SEALANT VALIDATION**  
www.swrionline.org

- On building materials that bleed oils, plasticizers or solvents that may affect adhesion
- On frost-laden or wet surfaces
- In totally confined joints (the sealant requires atmospheric moisture for cure)
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants)
- To surfaces in direct contact with food or other food-grade applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

### **HEALTH AND ENVIRONMENTAL INFORMATION**

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [dowcorning.com](http://dowcorning.com) or consult your local Dow Corning representative.

### **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

*We help you invent the future.™*

[dowcorning.com](http://dowcorning.com)

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09 97 23  
Coatings for  
Concrete and Masonry

# MasterProtect<sup>®</sup> HB 200

Water-based, 100% acrylic smooth waterproof coating

FORMERLY THOROCCOAT<sup>®</sup> 200

## PACKAGING

5 gallon (18.9 L) pails

## YIELD

See chart on page 2

## STORAGE

Store in unopened containers in a clean, dry area. Keep from freezing.

## SHELF LIFE

18 months when properly stored

## VOC CONTENT

Less than 100 g/L  
less water and exempt solvents.

## DESCRIPTION

MasterProtect HB 200 is a 100% acrylic, smooth waterproof coating designed for airless spray application.

## PRODUCT HIGHLIGHTS

- Airless spray application speeds production and reduces turnaround time
- 100% acrylic to protect and waterproof commercial and residential buildings
- Resists wind-driven rain, helps prevent water penetration into the substrate
- Breathable to allow water vapor to escape
- Excellent adhesion, bonds securely to substrate for long-term durability
- UV resistance provides excellent color retention for a long lasting attractive finish
- Excellent color retention for maintaining bright colors without fading over time
- Freeze/thaw resistant, suitable for cold climates
- Low VOC content for broad compliance across all regions

## APPLICATIONS

- Exterior
- Vertical and overhead surfaces
- Above grade
- Protecting and waterproofing

## SUBSTRATES

- Concrete
- Masonry
- Cement Plaster
- Stucco
- EIFS
- Existing Coatings

## HOW TO APPLY

### SURFACE PREPARATION

1. Surfaces should be clean and sound and free of all bond-inhibiting contaminants.
2. Concrete substrates should be fully cured.
3. Repair any holes, spalled and damaged concrete with appropriate Master Builders Solutions repair materials. Allow appropriate cure time prior to coating.
4. Remove any protruding concrete accessories and smooth out any surface irregularities.
5. High-pressure power wash surface (or abrasive blast on hard, dense surfaces) to create a profile of SP 3, per ICRI Guide 310.2.
6. Some stains may require chemical removal. Neutralize any cleaning compounds used and rinse with clean water.
7. Check adhesion of old coatings according to ASTM D 3359, Measuring Adhesion by Tape Test Method A.
8. Remove any blisters or delaminated areas and sand edges to smooth rough areas and provide transition to old paint areas.
9. Treat cracks greater than 1/32" with MasterProtect FL 746 or MasterProtect FL 748. Treat cracks larger than 1/4" as expansion joints and fill with appropriate Master Builders Solutions sealant.
10. New CMU must have a base coat of MasterProtect FL 749.

**Technical Data  
Composition**

MasterProtect HB 200 contains water, acrylic emulsion, fillers, and other proprietary ingredients.

**Test Data**

PROPERTY	RESULTS	TEST METHOD
Density, lbs/gal (kg/L)	11.3–12.3 (1.35–1.47)	ASTM D 1475
Solids, %		ASTM D 5201
By weight	56.3	
By volume	39	
Viscosity, KU	102–103	ASTM D 562 (Stormer)
Light reflectance, %	> 91	ASTM E 1347
Gloss	3.0	ASTM D 523
Resistance to wind-driven rain	Meets requirement – no water penetration	TT-C-555B
Artificial weathering and UV resistance, Xenon Arc, Type B; 5,000 hrs	Passed	ASTM G 26 Passed
Freeze/thaw resistance, 50 cycles	Passed	ICBO Method
Water-vapor permeance, perms	25	ASTM E 96
Salt spray (fog) resistance, 300 hrs	Passed	ASTM B 117
Flexibility, 1" mandrel	No cracking	ASTM D 522
Impact resistance, in-lbs		ASTM D 2794
Direct	82	
Reverse	78	
Fungus resistance	No growth; meets requirement	ASTM D 3273
Surface burning characteristics		ASTM E 84
Flame Spread	0	
Smoke	5	
Flash Point, ° F (° C)	> 200 (93)	ASTM D 56 Tag Closed Tester

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

**Yield**

RATE FT <sup>2</sup> /GAL (M <sup>2</sup> /L)	WET FILM MILS (MM)	DRY FILM MILS (MM)
150 (3.7) Re-coat only	11 (0.3)	4 (0.102)
125 (3.0)	13 (0.33)	5 (0.127)
75 (1.8)	22 (0.559)	8 (0.203)

#### MIXING

1. Prior to use, mix MasterProtect HB 200 at slow speed with drill and mixing paddle to ensure uniform color and to minimize air entrapment.
2. In multi-pail applications, mix the contents of each new pail into the partially used previous pail to ensure color consistency and smooth transitions from pail to pail.

#### APPLICATION

1. When MasterProtect HB 200 is intended to provide waterproofing, it should be applied as a two-coat system, achieving a total dry-film thickness (DFT) of 10–16 mils (0.25–0.4 mm). For re-coat applications one coat at 4–8 mils (0.1–0.2 mm) DFT. On porous substrates, texture and color may effect the hide and mils thickness of the re-coat and may require an additional coat. A mock-up area should be conducted to confirm coating consistency.
2. Apply MasterProtect HB 200 by brush, spray, roller, or spray-and-backroll.
3. Maintain proper uniform wet-film thickness (WFT) during application to ensure the performance characteristics desired (see yield rates section).
4. Always work to a natural break and maintain a wet edge during application.
5. For uniformity of color, application techniques must be consistent throughout the project.

#### ROLLER

1. Use a quality ¾–1¼" nap roller cover.
2. Completely saturate the roller and keep it loaded with the coating to build the required mils. Never dry roll.
3. Cross roll, maintaining a wet edge, to achieve uniform thickness. Backroll in one direction for consistent appearance.

#### SPRAY

1. Equipment is available for spraying MasterProtect HB 200. Contact equipment manufacturer for further recommendations.
2. Backrolling in one direction after spray application is recommended to achieve uniform film thickness.

#### BRUSH

1. Application by brush is recommended only for small inaccessible areas, e.g., on touch-ups.
2. Use only a nylon brush.

#### DRYING TIME

Times assume 70° F (21° C) and 50% relative humidity.

To touch: 1–2 hours

To recoat: minimum of 6 hours

Lower surface or air temperatures and higher relative humidity will extend the drying time.

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#### CLEAN UP

Clean all tools and equipment immediately with water. Cured material may be removed by mechanical means.

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#### FOR BEST PERFORMANCE

- Do not apply when substrate or ambient temperature is 40° F (4° C) or below or is expected to fall below 40° F (4° C) within 24 hours after application.
- Do not apply if rain is expected within 24 hours of application.
- Not for immersion service.
- Not intended for use as a horizontal traffic-bearing coating.
- Apply a 4 by 4 ft (1.2 by 1.2 m) test area to verify acceptable color and adhesion before proceeding with any project. The test method for measuring adhesion is ASTM D 3359, Measuring Adhesion by Tape Method A. On the 0–5 scale, a minimum adhesion rating of 4A is required.
- Color formulas containing organic colorants are susceptible to fading in exterior applications. Refer to Technical Support for guidance.
- Do not thin the material.
- For professional use only; not for sale to or use by the general public.
- Make certain the most current versions of product data sheet and SDS are being used; visit [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us) to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

#### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

#### LIMITED WARRANTY NOTICE

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Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on Master Builders' present knowledge and experience. However, Master Builders assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. Master Builders reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.

**FOR PROFESSIONAL USE ONLY. NOT FOR SALE TO OR USE BY THE GENERAL PUBLIC.**

7 | 07 92 00  
Joint  
Sealants

# MasterSeal<sup>®</sup> 920 and 921

Joint filler and backing material for  
Master Builders Solution sealants

FORMERLY CLOSED-CELL BACKER-ROD AND SOFT BACKER-ROD

## PACKAGING

### MASTERSEAL 920

Sizes ¼–1¼" (6–32 mm) are wound on reels and packaged in cartons, weighing about 15 lbs (6.8 kg) per carton.

The 1½–4" (38–102 mm) sizes are packaged in 7 ft (2.1 m) lengths and packaged in cartons, weighing about 35 lbs (15.89 kg) per carton.

### MASTERSEAL 921

Sizes ⅝–1⅝" (10–29 mm) are wound on reels and packaged in cartons, weighing about 15 lbs (6.8 kg) per carton.

The 1½–4" (38–102 mm) sizes are packaged in 6 ft (1.8 m) lengths and packaged in cartons, weighing about 18 lbs (8.1 kg) per carton.

## COLOR

Gray

## YIELD

See page 2 for charts

## DESCRIPTION

MasterSeal 920 is a closed-cell, polyethylene foam joint-filler and backing for elastomeric sealants. Its resilience accommodates dynamic joints. MasterSeal 921 is a reticulated closed-cell polyethylene foam joint-filler and backing for sealants. It compresses easily to accommodate joints of varying widths.

## PRODUCT HIGHLIGHTS

### MASTERSEAL 920

- Closed-cell polyethylene foam for low moisture absorption
- Lightweight, installs easily and quickly
- Resilient—accepts joint movement
- Nonimpregnated, nonstaining, and nonbleeding, will not discolor sealants or substrates
- Inert for compatibility with cold-applied sealants
- Round to give proper shape to sealant for effective function
- Nonadhering to sealants, requiring no additional bondbreaker

### MASTERSEAL 921

- Nongassing when punctured to eliminate bubbling of sealant
- Reticulated closed-cell polyethylene foam for low moisture absorption
- Nonimpregnated, nonstaining, and nonbleeding, will not discolor sealants or substrates
- Highly resilient to conform to irregular joints; installs easily and quickly
- Nonadhering to sealants, requiring no additional bondbreaker

## APPLICATIONS

- Backing for sealants
- Precast panel joints
- Expansion joints
- Window-and door-frame perimeters
- Coping joints
- Glazing joints
- Isolation joints
- Control joints

**Technical Data**

**MASTERSEAL 920**

**Composition**

MasterSeal 920 is closed-cell polyethylene foam.

**Compliances**

- ASTM C 1330, Type C

**MASTERSEAL 921**

**Composition**

MasterSeal 921 is reticulated polyethylene foam with a continuous outer skin.

**Compliances**

- ASTM C 1330, Type B

**Test Data**

**MASTERSEAL 920**

PROPERTY	RESULTS	TEST METHOD
<b>Water absorption, oz/in<sup>3</sup> (g/cc)</b>	< 0.017 (< 0.03)	ASTM C 1016
<b>Density, lb/ft<sup>3</sup> (kg/m<sup>3</sup>)</b>	1.50–3.0 (24–48)	ASTM D 1622
<b>Compression recovery, %</b>	> 90	ASTM D 5249
<b>Compression deflection, psi (kPa)</b>	> 2.97 (>20.5)	ASTM D 5249
<b>Tensile strength, psi (kPa)</b>	> 29.0 (>200)	ASTM D 1623
<b>Service temperature, ° F (° C)</b>	-45 to 160 (-43 to 71)	

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

**MASTERSEAL 921**

PROPERTY	RESULTS	TEST METHOD
<b>Water absorption, oz/in<sup>3</sup> (g/cc)</b>	0.058 (0.10)	ASTM C 1016
<b>Density, lb/ft<sup>3</sup> (kg/m<sup>3</sup>)</b>	1.50–3.0 (24–48)	ASTM D 1622
<b>Compression recovery, %</b>	> 90	ASTM D 5249
<b>Compression deflection, psi (kPa)</b>	> 2.97 (> 20.5)	ASTM D 5249
<b>Tensile strength, psi (kPa)</b>	> 29.0 (>200)	ASTM D 1623
<b>Service temperature, ° F (° C)</b>	-45 to 160 (-43 to 71)	

Test results are typical values obtained under laboratory conditions. Reasonable variations can be expected.

**Yield**

**ESTIMATING MASTERSEAL 920 REQUIREMENTS**

ROD DIAMETER IN (MM)	LINEAR FT PER CARTON (METERS PER CARTON)
1/4 (6)	6,400 (1,951)*
3/8 (10)	3,600 (1,097)**
1/2 (13)	2,500 (762)
5/8 (16)	1,550 (472)
3/4 (19)	1,100 (335)
1 (25)	550 (168)
1-1/4 (32)	400 (122)
1-1/2 (38)	552 (168)***
2 (51)	360 (110)***
2-1/2 (64)	240 (73)***
3 (76)	144 (43.9)***
4 (102)	90 (27.4)***

\* Supplied as two 3,200 ft (975 m) reels

\*\* Supplied as two 1,800 ft (549 m) reels

\*\*\* Supplied as 7 ft (2.1 m) lengths

**ESTIMATING MASTERSEAL 921 REQUIREMENTS**

ROD DIAMETER IN (MM)	LINEAR FT PER CARTON (METERS PER CARTON)
3/8 (10)	3,600 (1,097.3)*
5/8 (16)	1,550 (472)
7/8 (22)	850 (259.1)
1-1/8 (29)	500 (152.4)
1-1/2 (38)	552 (168.2)**
2 (51)	360 (109.7)**
2-1/2 (64)	240 (73.2)**
3 (76)	144 (43.9)**
4 (102)	90 (27.4)**

\* Supplied as two 1,800 ft (549 m) reels

\*\* Supplied as 6 ft (1.8 m) lengths

#### HOW TO APPLY

##### APPLICATION

1. Joint fillers have three major functions:
  - to control the depth of the sealant in proper relation to joint width
  - to provide a backing against which the sealant is applied, forcing the sealant to the sides of the joint
  - to prevent 3-sided bonding, ensuring proper functioning of the joint sealant
2. To install, compress backer-rod into the joint before sealants are applied.
3. Install backer-rod using a blunt probe or a plain-faced roller to force the rod to the desired depth.
4. A template or roller gauge may be used to control the depth at which the rod is placed.
5. DO NOT stretch backer-rod during installation but gently force into the joint so that the backer-rod fits tight against the sides of the joint.

##### APPROPRIATE BACKER-ROD SIZE

###### SIZING MASTERSEAL 920

1. For joint widths up to ¾" (19 mm), the diameter of the rod should be ⅛" (3 mm) larger than the width of the joint.
2. For ¾" (19 mm) wide joints, use 1" (25 mm) diameter rod.

###### SIZING MASTERSEAL 921

Select a backer-rod diameter that is approximately 25% larger than the width of the joint. See the yield table on the next page for both MasterSeal 920 and MasterSeal 921.

##### JOINT SEALING

1. Follow suggestions for joint-sealant application as directed by sealant manufacturer.
2. Where priming of the joint is necessary, primer should be applied only to the joint surfaces and allowed to dry before backer rod is placed. DO NOT prime backer rod.

##### FOR BEST PERFORMANCE

- Do not puncture, fold, stretch, or crease MasterSeal 920 / MasterSeal 921.
- Follow sealant manufacturer's suggestions for joint sealant width-to-depth ratio.
- Do not use with hot applied sealants.
- For joints subject to puncture by high heels or umbrella points, a stiffer or higher density backup material is required. Cork or non-impregnated cane-fiber joint fillers are suitable. Separate materials from the sealant by a nonadhering, bondbreaker (polyethylene tape).
- Make certain the most current versions of product data sheet and SDS are being used; visit master-builders-solutions.basf.us to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

##### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.basf.us](http://www.master-builders-solutions.basf.us), e-mailing your request to [basfbscst@basf.com](mailto:basfbscst@basf.com) or calling 1(800)433-9517. Use only as directed.

**For medical emergencies only, call ChemTrec® 1(800) 424-9300.**

##### LIMITED WARRANTY NOTICE

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