

TECHNICAL INFORMATION

WATERSTOPS

PRODUCT NAME

Swellseal® WA

Gungrade Polyurethane Waterstop

MANUFACTURER

De Neef Construction Chemicals, Inc.
5610 Brystone Drive
Houston, TX 77041
1(800) 732-0166

PRODUCT DESCRIPTION

Swellseal® WA is a single component hydrophilic mastic, designed for sealing smooth to very irregular construction joints and pipe penetrations. Swellseal® WA is supplied in cartridge or sausage. Material cures and swells in the presence of moisture or water. Curing Time is dependent on temperature and humidity, i.e. curing time will decrease if temperature and RH are higher. Swellseal® WA will become firm in 24-36 hours. Performance is not affected by the curing time.

APPROPRIATE APPLICATIONS

- Sealing of rough and smooth construction joints of cast in-place or precast concrete in wet and underwater applications.
- Sealing joints between pre-cast segments in wet or underwater applications (e.g. manholes, box culverts, cable ducts and pipes)
- Sealing of the joints between sheet piles.

ADVANTAGES

- Solvent free
- Due to its special formulation, Swellseal® WA can be applied to wet surfaces or in underwater applications.

TYPICAL PROPERTIES

Property	Value	Test Standard
Solids	100%	
Uncured		
Viscosity	Paste	
Density (at 20°C, 68°F)	Approx. 90 lbs/cu.ft.	ASTM D 3574 95
Slump in vertical applications	1/8 inch	
Hand dry (at 68°F and 60% rel. humidity)	10 hr	
Flash Point	> 266 °F	ASTM D 93
Cured (7 days at 25°C (77°F) 1cm Thick)		
Elongation at break	Approx. 625%	ASTM D 3574 95
Tensile strength	Approx. 312 psi	ASTM D-412
Resistance to hydrostatic pressure	>330 feet of head	DNCC
Swelling capacity in contact with water	200%	DNCC

Appearance

During application: pasty, Cured: rubbery
Color: white

- Swellseal® WA adheres to concrete, PVC, HDPE, steel, and fibreglass
- In contact with water Swellseal® WA will expand to more than 200% of its original cured volume.
- Flexible system, which adapts to the irregular surfaces
- Easy application with standard caulking guns
- Durable cured material will exceed the life of the structure.
- Good chemical resistance (*).
- Resistant to petroleum products, greases, mineral and vegetable oils

(*) For Chemical resistance contact the Technical Service Department @ 800-732-0166

Consumption

The consumption of **Swellseal® WA** per linear foot depends on the quality of the surface of the concrete.

	Width (of the joint)	Consumption
Cartridges 10.5 oz.	1/4 inch	25 – 35 ft.
	5/16 inch	12 – 15 ft.
	3/8 inch	approx. 10 ft.
Sausages 20 oz.	1/4 inch	50 – 70 ft.
	5/16 inch	24 – 30 ft.
	3/8 inch	approx. 20 ft.

PACKAGING

10.5 oz. cartridge	20 oz. sausage
12 per carton 6 lbs. net	12 per carton 24 lbs. net
1 pallet = 105 cartons 630 lbs.	1 pallet = 60 cartons 1500 lbs.
Weight per cartridge:	Weight per sausage:
1.2 lbs. gross	2.2 lbs. gross
1.1 lbs. net	2.0 lbs. net

LIMITATIONS

Applied at temperatures below 40°F the material will take approx. 10 to 15 days to cure (material cures slower at cooler temperatures and conversely working and cure times will be substantially reduced at higher temperatures).

SURFACE PREPARATION

Refer to DeNeef Surface Preparation Guidelines for more details.

INSTALLATION PROCEDURES

Swellseal® WA should be applied onto a dust-free concrete surface. The surface can be rough or smooth, moist or dry.

Application Method for 10.5 oz. Cartridges: Break the moisture proofing aluminum foil on the top of the cartridge and remove the plug from the bottom. Screw on the nozzle and

cut diagonally at the appropriate position. Place the cartridge into the caulking gun.

For 20oz. Sausages: Put the sausage in the empty tube of the bulk caulking gun and cut 1/8 inch off the top of the sausage. Close the tube and install the nozzle. Nozzles are supplied with the appropriate opening. **Swellseal® WA** must be applied in an uninterrupted band (minimum 3/8 inch wide and thick), gunned in the middle of the joint or prefab element. Concrete cover should be at least 3 inches on both sides, in order to avoid cracks from the pressure of material swelling. If **Swellseal® WA** is to be installation under water or during heavy rain the concrete operation should begin within 2 hours of application to provide confinement for the material or premature swelling may result lowering the effectiveness of the material.

STORAGE & HANDLING

Store in dry area for up to 12 months from date of production at temperatures between 40°F and 85°F for best performance. See shelf life details on the material packaging.

PRECAUTIONS

Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest. Refer to Material Safety Data Sheet for detailed safety precautions.

SAFETY INFORMATION

In the event of an EMERGENCY call
CHEM-TREC 800-424-9300.

WARRANTY INFORMATION

De Neef Construction Chemicals, Inc. products are warranted under the policy set forth under the WARRANTY section of the DeNeef Construction Chemicals Inc., product catalog. Warranty information can also be obtained via the DeNeef Construction Chemicals Inc. website at www.deneef.com, or by calling 713-896-0123 or toll free at 1-800-732-0166.

Rev. 03/2006