

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.
- Used to secure **Deneef Hydrophilic Waterstops** to rough surfaces.

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: Grey

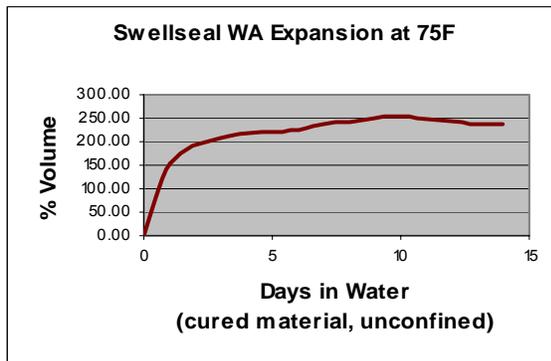
- **SWELLSEAL® WA** adheres to concrete, PVC, HDPE, steel, and fibreglass
- In contact with water **SWELLSEAL® WA** will expand to more than 200% of its original cured volume.
- Flexible system, which adapts to the irregular surfaces
- Easy application with standard caulking guns
- Durable cured material 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. |
| Sausages 20 oz. | 3/8 inch | approx. 10 ft. |
| | 1/4 inch | 50 – 70 ft. |
| | 5/16 inch | 24 – 30 ft. |
| | 3/8 inch | approx. 20 ft. |
| | | |



SWELLSEAL® WA 200% Expansion

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

- **SWELLSEAL® WA** must be fully confined to perform properly. When used in precast or joints, minimum concrete cover is 3" on all sides.
- **SWELLSEAL® WA** is not suitable for surface applications.
- Uncured material may expand much greater than 200% if unconfined, and will expand preferentially in the direction of least resistance.
- Applied at temperatures below 40°F, the material will take approximately 10 to 15 days to cure.

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 precast element. Concrete cover should be at least 3 inches on all sides, in order to avoid cracks from the pressure of material swelling. If **SWELLSEAL® WA** is to be installed 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.

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