

Product Description

Q-Seal™ 290S is a one- component thixotropic moisture curing polyurethane detector loop sealant. It is designed for use in both asphalt and concrete pavement to provide a weather and chemical resistant waterproof seal. Q-Seal™ 290S is a low VOC product meeting SCAQMD Rule 1168 standards.

Q-Seal™ 290S exhibits exceptional chemical resistance to the following chemicals:

- De-icing salts
- Gasoline
- Hydraulic brake fluid
- Motor oil
- Sodium chloride (5%)
- Potassium Acetate (50% by weight)

Uses

Q-Seal™ 290S is primarily used as a protective seal for traffic detector wire loops employed in actuated intersections. It may be used as a sealant for saw cuts in concrete or asphalt surfaces. In cases where the loop is to be installed in the road structure prior to the placement of the final asphalt wearing course, it is strongly recommended that Q-Seal™ 295 two-component loop sealant be used for these applications rather than Q-Seal™ 290S.

Curing

Q-Seal™ 290S will skin over in approximately 3 hours at 77°F (25°C) and 50% R.H. At temperatures below 77°F (25°C) this product will take proportionately longer time to cure. At temperatures above 77°F (25°C) it will take a proportionately shorter time to cure.

Surface Preparation

The substrate should be dry, dust free and as smooth as possible before installation of Q-Seal™ 290S. It is recommended that ambient temperatures at time of sealant application should not exceed 100°F (38°C) or fall below 36°F (2°C). It is recommended that Q-Seal™ 290S be applied by using a pressurized dispensing system, allowing for positive injection of Q-Seal™ 290S into the saw cut to properly encapsulate the loop wire. Normally the dispensing system consists of a 10:1 ratio pump with air regulator, gauge and air valves. The primer is an elevator with a follower plate that should be resistant to aromatic hydrocarbons. The hoses used should be Teflon lined with stainless steel covers. The flow gun itself should be a 6000 psi extrusion flow gun with appropriate wand attachments.

To apply the 30 fl. oz. (887 ml) cartridge, use a manual or air-operated caulking gun.

Clean-Up

Use Royal's S-235 Cleaning Solution. Caution: Clean equipment after use.



PROPERTY	VALUE
Brookfield viscosity (cPs, RCVF #6 spindle @ 20 rpm, max)	9,000 – 30,000
Available Colors	Grey or Black
Non-volatile content (%)	>85
Specific gravity (maximum)	1.32
Hardness: Shore A (minimum) (ASTM D2240-91)	70
Elongation (%) (minimum) (ASTM D412)	325
Tensile strength (psi, minimum) (ASTM D412)	750
Arc resistance (sec., minimum) (ASTM D495)	70
Dielectric constant (minimum) (ASTM D150)	6@50 Hz 4.25@500 kHz

NOTE: The above properties were measured at 77°F (25°C), 50% relative humidity, and are typical characteristics not to be considered as specifications.

Packaging

The following packaging formats are available:

- 4.5-gallon (17L) pails
- 30 fl. oz. (887 ml) cartridges.

Shelf Life is 1 year from date of manufacture.

Safety and Handling Precautions

Please refer to the material safety data sheet for Q-Seal™ 290S.

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