



CSI Code: 32 13 73.16

NO. 221

DECEMBER 2008
(Supersedes January 2004)

HI-SPEC® Hot-Applied, Polymeric Sealant

DESCRIPTION

HI-SPEC polymeric, hot-applied sealant is a premium-quality, single-component joint sealing compound. It is formulated with a carefully balanced blend of 100% virgin polymer, asphalt plasticizers and inert, reinforcing fillers to produce a hot-pour joint sealant with excellent bonding properties, high resiliency, ductility, and resistance to degradation from weathering. It will not become brittle at low temperatures; it will not flow or migrate from the joint at temperatures up to 140° F (60° C).

USES

HI-SPEC is recommended for large-scale sealing of joints and cracks in Portland cement concrete and asphalt concrete pavements because of its excellent cost efficiency, long sealant life, and high return on investment. Typical applications include sealing expansion and contraction joints in concrete highways (both transverse and longitudinal), joints between concrete pavements, asphaltic shoulders, and random cracks in both Portland cement concrete and asphalt concrete pavements.

TECHNICAL DATA

Pour Point	370° F (188° C)
Prolonged Heating	6 hours
Penetration	Less than .90 cm
Flow	Less than .3 cm
Bond	Passed 100% extension @ 0° F (-17° C) Passed 50% extension @ -20° F (-29° C)
Resiliency	More than 60%
Asphalt Concrete Compatibility	Compatible

FEATURES/BENEFITS

- Provides an economical hot-pour, single-component sealant for large-scale sealing of Portland cement concrete and asphalt concrete pavements.
- Recognized by public and private sector sealing contractors as the "best available" and "most cost efficient" joint sealant.
- Produces tough, dependable joint seals with exceptional longevity.
- Offers excellent cohesive and adhesive qualities.
- Resists degradation from weathering.
- Remains ductile and resilient at low temperatures.
- Will not flow or migrate at temperatures up to 140° F (60° C).

PACKAGING

50 lb. (22.7 kg) container
55 lb. (24.95 kg) cartons. Each carton contains two 27.5 lb. (12.475 kg) buns in polypropylene liners.

SPECIFICATIONS

ASTM D 3405
ASTM D 6690 Type I, II, III
AASHTO M 301
Federal Specification SS-S-1401C
FAA Specification Item P-605
Corps of Engineers CRD-C 530

COVERAGE

72.2 lb./ft. (1158 kg/m). A joint 1/2" x 1/2" (12.7 mm x 12.7 mm) will require 12.6 lb./100 linear feet (18.5 kg/100m).

CONTINUED ON REVERSE SIDE...

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LEED INFORMATION

May help contribute to LEED credits:

- EQ Credit 4.1: Low Emitting Materials: Adhesives and Sealants
- MR Credit 5.1: Regional Materials: 10% Extracted, Processed & Manufactured Regionally
- MR Credit 5.2: Regional Materials: 20% Extracted, Processed & Manufactured Regionally

APPLICATION

Melting ... HI-SPEC should be melted in a conventional double-boiler, oil-jacketed melter-applicator equipped with an agitator and separate control thermometers for both the oil bath and melting vat. On startup of the melting kettle, add small quantities of HI-SPEC with the plastic bag liner to the melter.

CONTROL MATERIAL TEMPERATURES AT 370° F (188° C). NEVER EXCEED 390° F (199° C).
RECOMMENDED POURING TEMPERATURE IS 370° F (188° C).

Only melt enough material to be poured the same day. Material should be added to the melter as the sealant is withdrawn during the sealing operation.

Surface Preparation ... The joints and cracks to be sealed must be clean and dry. Dust, dirt, and laitance should be removed prior to application. Proper routing should be slightly larger than the existing crack/joint to ensure proper adhesion to sidewalls.

Asphalt Pavement and Maintenance Sealing ... For ideal sealing with maximum effectiveness, it is suggested that cracks or joints be routed out to provide a sealant reservoir 1/2" (12.7 mm) wide with a minimum depth of 1/2" (12.7 mm). This provides for a 1:1 width-to-depth ratio. For joints 1" (25.4 mm) wide, the suggested depth is 1/2" (12.7 mm) minimum. To control and maintain the suggested joint depth and sealant usage, CERA-ROD™ heat-resistant backer rod from W. R. MEADOWS may be installed in the joint opening.

New Concrete Pavement Sealing ... Typical joint configuration should be 3/8" (9.54 mm) wide with a 1/2" (12.7 mm) depth for an approximate 1:1 width-to-depth ratio. Designated joint width and depth is determined by the appropriate highway or pavement authority. CERA-ROD from W. R. MEADOWS may be installed in the joint opening to control depth and sealant usage.

Application Method ... Apply sealant when substrate and air temperatures are 40° F (4° C) or higher. HI-SPEC should be applied into the crack/joint, slightly overfilling. Once applied, a follow-up should be done with a soft rubber, U-shaped squeegee to form a wipe zone of approx. 3-4" (76-2 - 101.6 mm) wide along the crack/joint and flush with the highway or pavement surface.

PRECAUTIONS

DO NOT DILUTE. Do not heat to temperatures above 390° F (199° C). Reheating or prolonged heating (over six hours) at or above the safe temperature of 390° F (199° C) could cause this material to gel in the application equipment. A rapid increase in viscosity, accompanied with stringiness, signals the approach of gelling. Should this happen, the material must be rapidly pumped from the melting kettle and discarded. For optimum sealant performance, all material left in the melter-kettle should be drawn off and discarded. Lines should be flushed out clean. Do not dilute with solvent. Read and follow application information and precautions. Refer to Material Safety Data Sheet for complete health and safety information.

For most current data sheet, further LEED information, and MSDS, visit www.wrmeadows.com.



LIMITED WARRANTY

“W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order.” Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.