COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 3065-14

Product Evaluation Coordinator
Colorado Department of Transportation
4670 North Holly Street, Unit A
Denver, Colorado 80216

Material code: 601.09.01.00

FOR INTERNAL CDOT USE

Material code description full name: Concrete, Patching Material

PART 1

Product name: VersaSpeed

Product category: Concrete\Repair/Patching\Rapid Set, Horizontal

Product representative (name & address):
Attn: Brian Lewis
The Euclid Chemical Company
19320 Redwood Road
Cleveland, Ohio 44110
Phone: (216) 692-8305 FAX: (216) 531-9399

Manufacturer (name & address):
Attn: Brian Lewis
The Euclid Chemical Company
19218 Redwood Road
Cleveland, Ohio 44110
Phone: (216) 531-9222 FAX: (216) 531-9596

Web-site address: www.euclidchemical.com

Web-site address: www.euclidchemical.com

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)

VersaSpeed is a cement based, versatile, one part, rapid setting patching and repair mortar for horizontal, and form and pour repair projects requiring only the addition of water. Do not add additional water to the surface during the finishing operation.

Compressive Strength ASTM C 109,
2" (50 mm) cubes @ 0.44 gal/50 lb bag.
Age Strength
3 hours.....3,500 psi (24.1 MPa)
1 day.....5,500 psi (37.9 MPa)
7 days.....8,500 psi (58.6 MPa)
28 days.....10,000 psi (68.9 MPa)

Flexural Strength ASTM C 348
1 day.....900 psi (6.2 MPa)
7 days.....1,000 psi (6.9 MPa)
28 days.....1,250 psi (8.6 MPa)

Set Time ASTM C 403 @ 72°F (22°C)
Initial Set..... 15 to 30 min
Final Set..... 20 to 40 min

Slant Shear Bond ASTM C 882
1 day..... >2,550 psi (17.6 MPa)
7 days..... >3,000 psi (20.7 MPa)
28 days..... >3,150 psi (21.7 MPa)

Chloride Permeability ASTM C 1202
28 days.....900 coulombs

Linear Shrinkage ASTM C 157
50% R. H. @ 73˚ F (23˚C)
1 day.....-0.064%
7 days.....-0.077%
28 days.....-0.083%

Restrictions, (installation and/or use):
Application temperature range of 20°F to 85°F. Do not use VersaSpeed for patches less than 1/4 inch (6 mm) deep.

Use of the product, (be specific to CDOT highway activities only):
Highways, Parking decks and ramps, Pavements

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
Fast set time and quick turnover of projects, High rapid strength, Open to standard rubber-tire traffic in 2 hours at 70°F (21° C), Economical repairs, Low permeability "Very Low" coulomb rating allowing excellent freeze/ thaw damage resistance, Excellent bond to properly prepared sound concrete, Can be extended up to 50% by weight, Wide temperature range of applications 20° to 85°F (-7° to 29°C), Can be coated with epoxy in 4 hours at 70°F (21° C) VersaSpeed is packaged in 50 lb (22.7 kg) bags. Shelf Life: 2 years in original, unopened package.

Specifications, (listing those applicable is required) **& Certificate of Compliance** (required to certify compliance with listed specifications):

- ☐ CDOT :
- ☒ ASTM : C 928 R3, [C 157, C 531, C 109, C 496, C 580, C 882, C 1583, C 413]
- ☐ AASHTO :
- ☐ FHWA :
- ☒ other : Additional testing - FM 5-578-Florida Method of Test for Concrete Resistivity, Florida Method of Test for Determining Low-Levels of Chloride in Concrete and Raw Materials - FM5-516, Bond strength by Iowa Shear.

Product testing, (from national/independent laboratories or universities) **& Certified Test Report** (CTR required to validate all claims):

- ☐ NTPEP-AASHTO :
- ☐ FHWA :
- ☒ other : Nelson Testing Laboratories (May 7, 2014)
- ☒ other : Florida DOT Structural Materials Laboratory (December 30, 2008)

State DOT Approvals, (current documentation required):
FL, NC, NJ, PA, SC, TN

Sample submitted: ☐ yes ☒ no ☐ n/a

Materials Safety Data Sheets (MSDS): ☒ yes ☐ no ☐ n/a

Notes/Additional Comments
A sample is available upon request at no cost to the DOT or customer.
This Form #595 is updated as of 2/23/2015.