

**COLORADO DEPARTMENT OF TRANSPORTATION
PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY**

APL Reference No.

4910-19

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

Material code:
711.02.01.00
Material code description full name:
Concrete, Admixture

PART 1

Product name: Creteshield UltraMix	Product category: Concrete\Admixture\Specific Performance
Product Representative (name & address): Attn: Jordan Beckett Obex Co. 680 G Street Suite C Jacksonville, OR 97530 Phone: (844) 265-3535 E-mail: Jordan@obexco.com	Manufacturer (name & address): Attn: Jordan Beckett Obex Co. 680 G Street Suite C Jacksonville, OR 97530 Phone: (844) 265-3535 E-mail: Jordan@obexco.com
Web-site address: www.obexco.com	Web-site address: www.obexco.com

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
Creteshield UltraMix is an additive for concrete mixes that has been demonstrated in ASTM C494 testing to enhance concrete properties as noted by the following: (1) Concrete Compressive Strength, 1 day +33%; 28 day +11%; 180 day +6% (2) Modulus of Rupture, 3 day -9%, 7 day +3%, 28 day +13%; 3. Modified Shrinkage, +5%.

In addition, other tests have shown improvements in, 1. ASR Expansion (ASTM C1567), 13% reduction, 2. Abrasion Resistance, 60% reduction, 3. Underwater Abrasion, 59% reduction, 4. Rate of Absorption of Water (ASTM C1585), 18% reduction.
Creteshield UltraMix can be used as topical additive (applied with sprayer up to 500SF/GL) to improve surface strength and finished properties while paving or finishing.

Restrictions, (installation and/or use):
Shipping and prior to installation: Cannot be frozen

Use of the product, (be specific to CDOT highway activities only):
Improved concrete for pavements, bridge infrastructure, foundations, top coatings, bridge decks, curbs, gutters, drainage features

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value than other manufacturer's products):
Enhances Strength, Modulus of Rupture, thus better quality concrete.
Decreases ASR; decreases abrasion due to surface traffic and due to water transmission of debris and abrasives. Decreases water absorption. For all, better concrete durability.
Saves money with increased length of concrete life cycle.
Improves safety by resisting traffic/vehicular surface wear and improving surface hardness; low VOCs

Specifications: (listing those applicable is required)
 CDOT : **601.05, 711.03**
 ASTM : **C494 Type S**
 AASHTO: **M194,**
 FHWA :
 other :

Certificate of Compliance (COC) provided Certificate of Verification (COV) provided for select categories ONLY

Product Testing: (National/independent laboratories or universities with Report Date.) **Certified Test Report (CTR)** provided to validate all claims.
 NTPEP-AASHTO:
 FHWA :
 other : **ASTM C494 Type S; June 11,2018; Intelligent Concrete, LLC (ASTM C1077 certified)**
 other :
 other :

State DOT Approvals, (current documentation required): Expiration Date **4 Years / 07-22-2023**

Sample submitted: yes no n/a Safety Data Sheets (SDS): yes no n/a

Alternate Product Category:
Additional Comments:
Sample being sent separately (Creteshield UltraMix packaged in 5 GL pail) from supplemental documents mailed package