

Illinois Department of Transportation
Bureau of Materials and Physical Research
APPROVED LIST OF CORROSION INHIBITORS
February 24, 2012

This list supersedes the November 6, 2009 list.

Standard Specifications for Road and Bridge Construction, Article 1021.06 (Adopted January 1, 2012)

For information regarding new product submittal, click the "New Submittal" bookmark to the left.

AXIM Italcementi Group
8282 Middlebranch Road
P.O. Box 234
Middlebranch, OH 44652
Phone: 330-966-0444
[Nathaniel Artman](#)
Producer/Supplier No. 4695-01
Material Code No. 43891
www.aximconcrete.com
"CATEXOL CN-CI"⁽²⁾

BASF Admixtures, Inc.
23700 Chagrin Blvd.
Cleveland, OH 44122-5554
Phone: 216-839-7500
Mark Piechuta
Producer/Supplier No. 4179-04
Material Code No. 43786
www.basf-admixtures.com
"RHEOCRETE CNI"^{(1) (2)}
Material Code No. 43850
"RHEOCRETE 222+"⁽¹⁾

Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110-2799
Phone: 216-531-9222
Brian Lewis
Producer/Supplier No. 614-01
Material Code No. 43853
www.euclidchemical.com
"EUCON CIA"⁽²⁾

General Resource Technology
2978 Center Court
Eagan, MN 55121
Phone: 651-454-4151
[800-324-8154](tel:800-324-8154)

[Jennifer Woolley](#)
Producer/Supplier No. 5204-01
Material Code No. 43801
www.grtinc.com
"POLYCHEM CORROSION
INHIBITOR (PCI)"⁽²⁾

RussTech Admixtures, Inc.
11208 Decimal Drive
Louisville, KY 40299
Phone: 502-267-7700
Kathi Showalter
Producer/Supplier No. 3988-01
Material Code No. 43798
www.russtechnet.com
"RUSSTECH RCI"⁽²⁾

W. R. Grace & Co.
62 Whittemore Ave.
Cambridge, MA 02140-1692
Phone: 800-354-5414
Denise I. White
Producer/Supplier No. 767-01
Material Code No. 43725
www.grace.com
"DAREX CORROSION
INHIBITOR (DCI)"^{(1) (2)}

(1) Dosage rate shall be according to Article 1020.05 (b) (12).

(2) Calcium Nitrite Solution

**Corrosion Inhibitors-Calcium Nitrite
Submittal for Approval**

Effective: July 27, 2007
Revised: [October 30, 2009](#)

A. Scope

The following guidelines are provided to clarify the submittal requirements for approving a corrosion inhibitor-calcium nitrite according to Section 1021 of the Standard Specifications for Road and Bridge Construction¹.

B. Procedure

When submitting a corrosion inhibitor-calcium nitrite to the Department, the following shall be included in the certification:

- The specific product brand name,
- Certification of the manufacturing range for specific gravity according to ASTM C 494,
- Certification of the midpoint and manufacturing range for residue by oven drying according to ASTM C 494,
- Certification of the manufacturing range for pH according to ASTM E 70,
- An infrared spectrophotometer trace (IR) of current production material no more than five years old (the IR scan should be labeled with the date the scan was performed, the product name, and the manufacturer's name),
- AASHTO accredited independent laboratory tests results, no more than five years old, in accordance to:
 - [ASTM C 494, Type C, or](#)
 - [ASTM C 1582*](#)**The corrosion-inhibiting performance requirements do not apply.*
- Material Safety Data Sheet,
- Technical Data Sheet,
- The amount by weight of chloride bearing compounds, or other similar additives or chemical agents present in the admixture,
- A signed letter stating the subject material will not be changed without written notification to the Department,
- Contact person's name, title, address, email address, and phone number, and
- Acknowledgement by Company (see next page).

The submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials & Physical Research
126 East Ash Street
Springfield, Illinois 62704-4766

The manufacturer will be notified when the submittal review is complete. For questions regarding the approval process, contact Melinda Winkelman at 217-782-0117.

Prior to approval of an admixture, the Engineer reserves the right to request a sample for testing. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

C. Recertification

Annual recertification of all corrosion inhibitors is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. During recertification, the manufacturer establishes the ranges for specific gravity, residue by oven drying, and pH for the upcoming production season. The recertification paperwork is due January of the following year. For example, the recertification letter is sent late November 2009 and due by January 2010. The recertification paperwork sets the ranges for the products to be made during the 2010 calendar year..

¹ <http://www.dot.il.gov/desenv/hwyspecs.html>

Illinois Department of Transportation
Bureau of Materials and Physical Research

**Corrosion Inhibitors-Calcium Nitrite
Submittal for Approval**

Effective: July 27, 2007
Revised: May 15, 2009

Instructions for Acknowledgement by Company:

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

_____ desires to obtain advance approval of materials to be
(Insert name of company)
supplied to Department of Transportation contractors as more fully described herein. I
and _____ understand that the Department of Transportation
(Insert name of company)
reserves the right in its contracts to approve materials at the source of supply as
provided in Article 106.01 of the Standard Specifications for Road and Bridge
Construction. I and _____ further understand that approval of
(Insert name of company)
company supplied material pursuant to this request does not constitute a contract to
supply material to the State of Illinois or any of its contractors, and that the Department
of Transportation does not assure or guarantee that any materials approved hereunder
will be supplied to the State or any of its contractors. In consideration of approval, I and
_____ agree to the terms, conditions and performance
(Insert name of company)
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company: Individual Partnership Corporation

Company Name _____

Printed Name _____

Signature _____

Title _____

Business Address _____

City/State/Zip Code _____

Date of Signature _____

Illinois Department of Transportation
Bureau of Materials and Physical Research

**Corrosion Inhibitors-Other Materials
Submittal for Approval**

Effective: July 27, 2007
Revised: [January 8, 2010](#)

A. Scope

The following guidelines are provided to clarify the submittal requirements for approving a corrosion inhibitor-other materials according to Section 1021 of the Standard Specifications for Road and Bridge Construction¹.

B. Procedure

When submitting a corrosion inhibitor-other materials to the Department, the following shall be included in the certification:

- The specific product brand name,
- Certification of the manufacturing range for specific gravity according to ASTM C 494,
- Certification of the midpoint and manufacturing range for residue by oven drying according to ASTM C 494,
- Certification of the manufacturing range for pH according to ASTM E 70,
- An infrared spectrophotometer trace (IR) of current production material no more than five years old (the IR scan should be labeled with the date the scan was performed, the product name, and the manufacturer's name),
- AASHTO accredited independent laboratory tests results, no more than five years old, in accordance to:
 - ASTM C 1582*

*Note: The ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent lab.
- Material Safety Data Sheet,
- Technical Data Sheet,
- The amount by weight of chloride bearing compounds, or other similar additives or chemical agents present in the admixture,
- A signed letter stating the subject material will not be changed without written notification to the Department,
- Contact person's name, title, address, email address, and phone number, and
- Acknowledgement by Company (see next page).

The submittal information shall be sent to:

Melinda Winkelman
Illinois Department of Transportation
Bureau of Materials & Physical Research
126 East Ash Street
Springfield, Illinois 62704-4766

The manufacturer will be notified when the submittal review is complete. For questions regarding the approval process, contact Melinda Winkelman at 217-782-0117.

Prior to approval of an admixture, the Engineer reserves the right to request a sample for testing. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO. The manufacturer is advised that all corrosion inhibitors-other materials are still being tested by the Department at this time.

C. Recertification

Annual recertification of all corrosion inhibitors is required. During the last quarter of the calendar year, a recertification letter will be sent to the manufacturer. During recertification, the manufacturer establishes the ranges for specific gravity, residue by oven drying, and pH for the upcoming production season. The recertification paperwork is due January of the following year. For example, the recertification letter is sent late November 2009 and due by January 2010. The recertification paperwork sets the ranges for the products to be made during the 2010 calendar year.

¹ <http://www.dot.il.gov/desenv/hwyspecs.html>

Illinois Department of Transportation
Bureau of Materials and Physical Research

**Corrosion Inhibitors-Other Materials
Submittal for Approval**

Effective: July 27, 2007
Revised: May 15, 2009

Instructions for Acknowledgement by Company:

The owner, partner, or corporate officer shall complete the following and return a signed and dated copy with the product submittal or recertification.

_____ desires to obtain advance approval of materials to be
(Insert name of company)
supplied to Department of Transportation contractors as more fully described herein. I
and _____ understand that the Department of Transportation
(Insert name of company)
reserves the right in its contracts to approve materials at the source of supply as
provided in Article 106.01 of the Standard Specifications for Road and Bridge
Construction. I and _____ further understand that approval of
(Insert name of company)
company supplied material pursuant to this request does not constitute a contract to
supply material to the State of Illinois or any of its contractors, and that the Department
of Transportation does not assure or guarantee that any materials approved hereunder
will be supplied to the State or any of its contractors. In consideration of approval, I and
_____ agree to the terms, conditions and performance
(Insert name of company)
standards of the Standard Specifications for Road and Bridge Construction.

Type of Company: Individual Partnership Corporation

Company Name _____

Printed Name _____

Signature _____

Title _____

Business Address _____

City/State/Zip Code _____

Date of Signature _____