

Illinois Department of Transportation  
Bureau of Materials and Physical Research  
**APPROVED LIST OF CORROSION INHIBITORS**  
**November 6, 2009**

**This list supersedes the May 15, 2009 list.**

Standard Specifications for Road and Bridge Construction, Article 1021.06 (Adopted January 1, 2007)

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  
Rick Blackburn  
Producer/Supplier No. 4695-01  
Material Code No. 43891  
[www.aximconcrete.com](http://www.aximconcrete.com)  
**"CATEXOL CN-CI"**

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](http://www.basf-admixtures.com)  
**"RHEOCRETE CNI"** <sup>(1)</sup> <sup>(2)</sup>  
Material Code No. 43850  
**"RHEOCRETE 222+"** <sup>(1)</sup>

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](http://www.euclidchemical.com)  
**"Eucon CIA"** <sup>(2)</sup>

General Resource Technology  
2978 Center Court  
Eagan, MN 55121  
Phone: 651-454-4151  
Mike Ames  
Producer/Supplier No. 5204-01  
Material Code No. 43801  
[www.grtinc.com](http://www.grtinc.com)  
**"POLYCHEM CORROSION  
INHIBITOR (PCI)"** <sup>(2)</sup>

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](http://www.russtechnet.com)  
**"RUSSTECH RCI"** <sup>(2)</sup>

Sika Corporation  
201 Polito Avenue  
Lyndhurst, New Jersey 07071  
Phone: 201-508-6722  
Ondrej Masek  
Producer/Supplier No. 2231-01  
Material Code No. 43805  
[www.sikausa.com](http://www.sikausa.com)  
**"SIKA CNI"** <sup>(2)</sup>

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](http://www.grace.com)  
**"DAREX CORROSION  
INHIBITOR (DCI)"** <sup>(1)</sup> <sup>(2)</sup>

(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 Construction<sup>1</sup>.

**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..

<sup>1</sup> <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 Construction<sup>1</sup>.

**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.

<sup>1</sup> <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 \_\_\_\_\_