# Illinois Department of Transportation Bureau of Materials

# Qualified Product List CORROSION INHIBITORS

**April 26, 2024** 

This list supersedes the May 12, 2023 list.

Standard Specifications for Road and Bridge Construction, Article 1021.07 (Adopted January 1, 2022)

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

Master Builders Solutions Admixtures US 23700 Chagrin Blvd. Cleveland, OH 44122-5554 Phone: 216-839-7500 Mr. Mark Piechuta Producer/Supplier No. 4179-04 Material Code No. 43786

www.master-builders-solutions.com

"MASTERLIFE CI 30" (1) (2) Material Code No. 43850 "MASTERLIFE CI 222" (1)

Euclid Chemical Company 19320 Redwood Road Cleveland, OH 44110-2799 Phone: 216-692-8305 800-321-7628 Mr. Brian Lewis

Producer/Supplier No. 614-01 Material Code No. 43853 www.euclidchemical.com "EUCON CIA"<sup>(2)</sup>

GCP Applied Technologies 100 Research Drive Wilmington, MA 01887 Phone: 617-498-4816

800-354-5414 Mr. Robert Hoopes

Producer/Supplier No. 767-01 Material Code No. 43725

www.GCPat.com

"DAREX CORROSION INHIBITOR (DCI)"(1) (2)

Mapei Americas 1144 East Newport Center Drive Deerfield Beach, FL Phone: 954-246-8888 Mr. Bruce Haller Producer/Supplier No. 6354-02 Material Code No. 43801 www.mapei.com

"POLYCHEM CI (PCI)"

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

Sika Corporation
201 Polito Avenue
Lyndhurst, New Jersey 07071
Phone: 330-495-0109
Mr. Nathaniel Artman
Producer/Supplier No. 2231-01
Material Code No. 43805
<a href="https://usa.sika.com/">https://usa.sika.com/</a>
"SIKA CNI" (2)

(1) Dosage rate shall be according to Article 1020.05 (b) (10).

(2) Calcium Nitrite Solution

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### Corrosion Inhibitors-Calcium Nitrite Submittal for Approval

#### A. Scope

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

#### 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.
- 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 (Form <u>BMPR 101</u>). If your company does not already have a product included on an IDOT QPL, please submit a signed copy of the Acknowledgement by Company form with your product submittal.

The submittal information shall be sent to:

Illinois Department of Transportation Bureau of Materials Melinda Winkelman 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 2022 and due by January 2023. The recertification paperwork sets the ranges for the products to be made during the 2023 calendar year.

## Illinois Department of Transportation Bureau of Materials

# Qualified Product List CORROSION INHIBITORS

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## Corrosion Inhibitors-Other Materials Submittal for Approval

#### 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.

#### 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.
- 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 (form <u>BMPR 101</u>). If your company does not already have a product included on an IDOT QPL, please submit a signed copy of the Acknowledgement by Company form with your product submittal.

The submittal information shall be sent to:

Illinois Department of Transportation Bureau of Materials Melinda Winkelman 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 2022 and due by January 2023. The recertification paperwork sets the ranges for the products to be made during the 2023 calendar year.