

Retarding Admixture For Use in Portland Cement Concrete

| Supplier | Brand | Dosage Rate |
|--|--------------------------|-----------------------------------|
| BASF Construction Chemicals Cleveland OH | MasterPozzolith 200 | Up to 6 oz per 100# cement |
| | MasterPozzolith 700 | Up to 7 oz per 100# cement |
| | MasterPozzolith 80 | 3 - 10 oz per 100# cement |
| | MasterSet DELVO | 4 ± 1 oz per 100# cement |
| | MasterSet R 100 | 3 ± 1 oz per 100# cement |
| | MasterSet R 300 | 4 ± 1 oz per 100# cement |
| | MasterSet R 961 | 4 ± 1 oz per 100# cement |
| Chryso, Inc. Rockwall TX | Chryso ControlSet 125 | 2 - 7 oz. per 100# cement |
| Euclid Chemical Company, The Cleveland OH | Eucon LR | *6 oz. per sack of cement |
| | Eucon NR | 4 oz. per 100# cement |
| | Eucon Retarder 100 | 2.5 - 5.0 oz. per 100# cement |
| | Eucon Retarder 75 | 3 - 5 oz. per 100# cement |
| | Eucon SE | 2 - 5 oz. per 100# cement |
| | Eucon Stasis | 4 - 16 oz. per 100# cement |
| | Eucon W.O. | 4 - 16 oz. per 100# cement |
| | Eucon WR | 2 - 10 oz. per 100# cement |
| | Eucon WR-91 | 3 - 8 oz. per 100# cement |
| Fritz-Pak Corporation Mesquite TX | FR-1 | 1.5 – 2.0 Dry oz. per 100# cement |
| | Mini Delayed Set | 3 - 5 Dry oz. per 100# cement |
| | Standard Delayed Set | 3 - 5 Dry oz. per 100# cement |

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GCP Applied Technologies Inc.
Cambridge MA

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| Daratard 17 | 2 - 8 oz. per 100# cement |
| Daratard HC | 2 - 4 oz. per 100# cement |
| Recover | 2 - 6 oz. per 100# cement |
| WRDA with Hycol | 4.5 - 8 oz. per 100# cement |
| WRDA-35 | 5 - 8 oz. per 100# cement |
| WRDA-79 | 7.5 - 15 oz. per 100# cement |
| WRDA-82 (Type D) | 3 - 10 oz. per 100# cement |
| Zyla 610 | 2 - 7 oz. per 100# cement |
| Zyla 614R | 3 - 5 oz. per 100# cement |
| Zyla R | 2 - 8 oz. per 100# cement |

Hunt Process Corp. Southern
Ridgeland MS

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| HPS-R | *5 - 8 oz. per 100# cement |
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Mapei Corporation
Deerfield Beach FL

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| Polychem R (Type D) | *2 - 5 oz. per 100# cement |
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Premiere Concrete Admixtures
Pioneer OH

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| Optiflo 100R | 3 - 5 oz. per 100# cement |
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RussTech, Inc.
Louisville KY

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| LC-400P | 5 - 8 oz. per 100# cement |
| LC-400R | 3 - 6 oz. per 100# cement |

Sika Corporation
Lyndhurst NJ

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| Sika Plastiment | *2 - 6 oz. per 100# cement |
| Sika Plastocrete-250 | 5 - 9 oz. per 100# cement |

* Classed as a type D at this dosage rate

Method of Documentation of Acceptance:

By brand and source.

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Method of Approval:

THE FOLLOWING PROCEDURE IS TO BE USED IN ACQUIRING APPROVAL OF RETARDING AGENTS:

- The manufacturer/supplier shall provide the Materials Division with a test report from a recognized laboratory indicating compliance with AASHTO M 194, Standard Specification for Chemical Admixtures for Concrete. A recognized laboratory is any State Highway Agency, Federal Highway Administration or independent laboratory regularly inspected by AASHTO resource, Cement and Concrete Reference Laboratory(CCRL) or other Department approved accreditation/inspection agency. All test reports shall include the manufacturer's name, brand name of the material, and date of testing.
- In addition to the requirements of the AASHTO Specification, the manufacturer/supplier shall include:
 - The type material, B or D – (B: Retarding admixture, or D: Water-reducing and retarding admixture).
 - The constituents of the retarder (Example – This material is a solution of calcium salt of lignosulphonic acid).
 - The chloride content of the admixture and whether or not chloride was added during its manufacture.
 - Recommended dosage rate.
 - Uniformity and equivalence tests according to AASHTO M 194 to provide results against which later comparison can be made. Where the nature of the admixture or the Department's testing capabilities may make some or all of the procedures unsuitable, other requirements may be established by agreement between the Department and the manufacturer.
- A sample of the retarding agent will be supplied to the Materials Division at the following address. Product information and Safety Data Sheets (SDS) must be included.
- If the product meets material requirements, the product will be approved for inclusion after receipt of a signed QPL certification.
- Destination samples will be taken as deemed necessary to assure compliance with specifications. Material failures either in the laboratory or in field applications may be considered sufficient cause to reject the material. The Materials Engineer will determine if the failures warrant discontinuing acceptance and removal from this QPL.

No information contained in these lists is to be used for promotional purposes.

The manufacturer of privately labeled products must be disclosed.