## APPROVED Portland Cement Concrete Admixtures Date last edited: 07/22/2025 Important! Type A and Type D admixtures may not be compatabile only use in combination in the same batch if the manufacturer allows.

Manufacturer	Air Entroining Adv	Air Entroining Adminture		Water Poducers  Water Poducers			
Manufacturer	Air-Entraining Admixtures		Water Reducers		Water Reducing Set Retarders		
	AASHTO M154	Recommended Dosage Rate	AASHIO M194 - Type A	Recommended Dosage Rate	AASHTO M194 - Type D	Recommended Dosage Rate	
	Std. Spec. 501.2.2	oz/cwt	Std. Spec. 501.2.3	oz/cwt	Std. Spec. 501.2.3	oz/cwt	
Chryso			Chryso Enviromix 159	3 - 14			
Rockwall, TX 800-936-7553			Chryso Enviromix SE Chryso Enviromix 728 Chryso Quad 842	3 - 6 3 - 9 2 - 10			
DarCole Products, Inc	DarCole Synthetic Air (DSA) 110		DarCole Water Reducer (DWR) 385	3 - 6	DarCole Hydration Stabilizer (DHS)	1 - 12	
Henderson, KY 270-826-6499	DarCole Synthetic Air (DSA) 112		DarNiok (DNL) 485 DarNiok (DNL) 785	4 - 10 6 - 12			
Euclid Chemical Company Cleveland , OH	Eucon AEA-92-S Eucon Air MAC-12	0.1 - 4 0.1 - 4	Eucon MR Eucon WR	4 - 8 2 - 5	Eucon WR Eucon WR-91	6 - 10 6 - 10	
800-321-7628	Eucon Air MAC-12 Eucon Air Mix 250		Eucon WR-91	2 - 5 2 - 5	Eucon Stasis	1 - 16	
1	Eucon AEA-92	0.1 - 4	Plastol 6420 Plastol 6425	2 - 5	Eucon Retarder 100	2 - 6	
	Eucon Air MAC-6	0.1 - 4	Plastol RX-10 Eucon MRX	3 - 8 2 - 8 3 - 5			
Fritz-Pak Concrete Admixtures	Air Plus	See Technical			Delayed Set Standard	See Technical Data	
Mesquite, TX 888-745-4116	Super Air Plus	Data Sheet			Delayed Set Mini	Sheet	
GCP Technologies	Daravair 1000	0.25-6	ADVA Cast 600	2 - 5	Recover	2 - 6	
Cambridge MA	Daravair 1400 Darex II AEA	0.25-6	MIRA 110 MIRA 62	3 - 9	Daratard 17 WRDA 82	2 - 8	
617-498-4555	TERAPAVE AEA	0.5-5 0.25-3	WRDA 82 ZYLA 630	2.5 - 10 3 - 6 2 - 5	ZYLA	4 - 8 3 - 7	
Mapei Americas	Mapeair (Polychem) SA	0.125 - 3	Dynamon NGR 1062	3 - 6	Mapecrete Resolve	1 - 12	
Deerfield Beach, FL	Mapeair (Polychem) SA-20		Dynamon SX	2 - 6	Mapeplast (Polychem) 400 NC	4 - 6	
954-246-8888	Mapeair (Polychem) SA-50		Dynamon SX 37	1 - 3	Mapeplast 440 NS	7.5 - 11	
	Mapeair (Polychem) VR		Mapecube 60 Mapecube 60W	3 - 9 4 - 10	Polychem Renu Mapetard (Polychem) R	1 - 12 2 - 5	
			Mapeplast (Polychem) 400 NC	3 - 5			
			Mapeplast 440 NS Mapeplast (Polychem) Plaver Plus	2 - 7 2 - 8			
			Mapeplast (Polychem) KB 1200	3 - 8			
Master Builders Solutions Admixtures US, LLC	MasterAir AE 90		MasterPozzolith 80	3 - 7	MasterPozzolith 80	7 - 10	
Cleveland, OH 216-839-7500	MasterAir AE 200 MasterAir 400	0.125 - 1.5 0.25 - 4	MasterGlenium 7920 MasterPolyheed 1020	2 - 4 3 - 5	MasterSet Delvo MasterSet R 300	3 - 5 3 - 5	
			MasterEase 5000	1 - 5	MasterPozzolith 322	4.75 - 7	
			Master Glenium 7500 Master X-seed 66	2 - 7 4 - 10			
			MasterPolyheed 997	3 - 13			
			MasterPozzolith 322 MasterPolyheed 1025	3 - 4.75 3 - 5			
			MasterGlenium 7960	2 - 4 3 - 8			
Duratask	 	1 05 0	MasterPolyheed 900		L C 400D		
Russtech Louisville, KY	RSA-10 RVR-15	0.5 - 2	Superflo 2000 RM Superflo 2000 SCC	1 - 3 1 - 3	LC-400R LC-400P	3 - 6 5 - 8	
502-267-7700	RAE-260	0.5 - 2	Extendflo X90 LC-400P	2 - 12 3 - 5	RENU	1 - 12	
			FinishEase-NC	3 - 8			
Sika	Sika Air 260		Plastocrete 250	2 - 5	Plastiment XR	0 - 6	
Lyndhurst, NJ 201-933-8800	Sika Air 360 Sika Multi-Air 25		Sika ViscoCrete 1000 Sika ViscoCrete 1100	2 - 12 1 - 6	Sikatard 440 Plastocrete 250	0 - 8 5 - 8	
	SikaControl Air 160	0.1 - 6	Sikament 686	3 - 8	Sika Plastocrete 161	5 - 8	
	Sika AEA 14	0.1 - 6	Sika ViscoCrete 2100 Sika ViscoCrete 6100	1 - 6 3 - 8			
			Sika ViscoFlow 2020	3 - 8 2 - 8			
			Sika Plastocrete 161	2 - 5			
			SikaPlast 200 SikaPlast 300 GP	3 - 8 2 - 8			
			SikaControl 312 SE	2 - 16			
Premiere Concrete Admixtures	ConAir		OptiFlo 500	1.5 - 3	OptiFlo 500	3 - 5	
Pioneer, OH 800-503-3418	ConAir 260 CounAir X		OptiFlo Plus OptiFlo MR	5 - 10 3 - 12	ProLong L OptiFlo 50	2 - 8 5 - 8	
<del>                                    </del>	Outiful A	0.5-5	OptiFlo 700	3 - 12 4 - 10	OptiFlo 100R	2 - 8	
			UltraFlo 5600	3 - 8			
			Ultraflo 2000	2 - 6 3 - 5			
			OptiFlo 50 EcoFlo Green	3 - 5 2 - 8			
Krete	KreteAir 800	0.25 - 6	KreteSuperPlast 700	3 - 8	KreteDcel 20	2 - 6	
Brookfield, WI	KreteAir 850	0.25 - 6	Taleteouperi last 100	J - 0	IN CIODOGI AU	2-0	
262-783-6460		<u> </u>				]	



### **Wisconsin Department of Transportation**

Division of Transportation System Development Bureau of Technical Services 3502 Kinsman Boulevard Madison, WI 53704

# Approved Product List Application Process for Chemical Admixtures used in Concrete

Wisconsin Department of Transportation (WisDOT) requires chemical admixtures used in concrete projects from the approved product list (APL). This APL approval process for chemical admixtures is subject to the requirements described below.

#### **Approval Process**

- To apply for WisDOT's APL process for concrete chemical admixtures, the manufacturer/supplier must submit the required information listed below for WisDOT's review:
  - Written certification letter from the manufacturer indicating chemical admixture compliance with APL material property requirements section.
  - Safety data sheet
  - Technical data sheet
  - o Infrared spectrum (IR) of the admixture
  - Admixture information:
    - Product name and chemical admixture type
    - Recommended dosage rates expressed in fluid ounces per hundred weight (fl.oz./cwt)
      - If the product is a multi-Type chemical admixture, provide the appropriate dosage rate for the intended Type.
    - Compatibility with Fly Ash and other chemical admixtures (and dosage rate if different)
    - Chloride content
    - Physical properties (total solids, PH, and specific gravity)
  - American Association of State Highway and Transportation Officials (AASHTO) Product Evaluation & Audit Solutions (formerly NTPEP) or any accredited (AASHTO or Cement and Concrete Reference Laboratory (CCRL)) independent laboratory test data showing concrete admixture has met or exceeded the requirements in outlined in the material property requirements section.
  - o Manufacturer's chemical usage instructions.
  - Primary point of contact for the submitted product including name, email address, phone number, and mailing address.
- The submitted test data must be less than five years old. Submit the above required information to <a href="mailto:DOTProductSubmittal@dot.wi.gov">DOTProductSubmittal@dot.wi.gov</a>.
- By applying, the manufacturer/supplier certifies that they have reviewed the standards/requirements, and their product meets the requirements. WisDOT may reject an APL submittal without further review if WisDOT determines that the product does not meet standards/requirements.
- Applications will be <u>reviewed within 4 weeks of submittal</u> and when the review is completed, manufacturers/suppliers will be notified. Approved products will be included on the department's APL.

#### **Material Property Requirements**

• The chemical admixtures must meet or exceed the testing requirements as specified in Table 1 and WisDOT Standard Specifications 501.2.5.

**Table 1.** Concrete Chemical Admixtures Testing Requirements

Admixture Type	Standard		
Water Reducers Type A	AASHTO M194		
Water Reducing Set Retarders Type D	AASHTO M194		
Air Entraining	AASHTO T154		

## **Compliance**

- To remain on the WisDOT APL, the manufacturer/supplier must submit the concrete chemical admixture certification letter annually confirming compliance with material property requirements section of this APL and indicating that no changes in chemical admixture formulation, composition, concentration or physical properties have occurred since the material was initially evaluated.
- The manufacturer/supplier is required to reapply every 5 years.
- The department may request re-compliance at any time. WisDOT may request one-quart (one-liter) of representative sample of the material to test for conformance and compare the results with the vendor test data. The verification testing sample will be taken by a WisDOT project engineer.
- The manufacturer/supplier shall be responsible for quality control of the product. The manufacturer/supplier shall also sample and test the admixture as necessary during production to ensure that all material conforms to the specifications as listed above and is consistent with the sample of material that was tested and approved. When requested by the Department, the manufacturer/supplier will submit the quality control data within 30 days. Any change in the product will require a requalification at the manufacturer's/supplier's expense.

#### Non-Compliance

- WisDOT will continue to regard this approval valid for 5 years unless/until any of the following conditions arise:
  - o If the manufacturer/supplier changes the chemical admixture formulation, composition, concentration or physical properties without notifying WisDOT.
  - The product samples audited/tested by WisDOT do not meet the requirements as specified in this document.
- Manufacturers/suppliers are required as a condition of approval to inform WisDOT of any of the above conditions as soon as they become aware of them.

#### Correspondence

If the name and/or address of the contact person in your company for this correspondence have changed, or if you have questions or need further information, please contact us via email DOTProductSubmittal@dot.wi.gov.