

South Carolina  
 Department of Transportation  
 Qualified Air Entraining and  
 Chemical Admixtures for Concrete

PRODUCER	TRADE NAME	TYPE	CODE	RECOMMENDED DOSAGE RATE	NTPEP NUMBER	NOTE
Euclid Chemical Company 19218 Redwood Road Cleveland Ohio 44110 Attn. Brian Lewis blewis@euclidchemical.com Office 216-692-8305 Cell 216-375-9027	Plastol 341	A & F	WRA/WRA-HR	2 to 10	CADD(2010)-02-040	
	Accelguard 80	C & E	A/WRA-A	12 to 90	CADD(2010)-01-024	
	Accelguard NCA	C & E	A/WRA-A	12 to 75	CADD(2010)-01-022	
	Eucon Air 30	AEA	AEA	0.5 to 1	CADD(2010)-01-047	1
	Eucon Air 40	AEA	AEA	0.5 to 1	CADD(2010)-01-048	1
	Eucon LR	A	WRA	3 to 10	CADD(2010)-01-026	
	Eucon LW	A	WRA	3 to 6	CADD(2010)-01-028	
	Eucon NW	A	WRA	2 to 6	CADD(2010)-01-020	
	Eucon NR	A & D	WRA/WRA-R	3 to 5	CADD(2010)-01-049	
	Eucon SPC	A & F	WRA-WRA-HR	3 to 12	CADD(2010)-01-016	9
	Eucon SPJ	A & F	WRA/WRA-HR	4 to 7	CADD(2010)-01-015	9
	Eucon X15	A & F	WRA/WRA-HR	3 to 10	CADD(2010)-01-030	
	Eucon X20	A & F	WRA/WRA-MR	3 to 15	CADD-2011-01-018	
	Eucon AcN	C & E	A/WRA-A	20 to 60	CADD-2010-01-029	14
	Eucon AcN 200	C & E	A/WRA-A	10 to 60	CADD-2011-01-020	14
	Eucon LR	D	WRA-R	3 to 10	CADD(2010)-01-026	
	Eucon TR	D	WRA-R	3 to 6	CADD-2011-01-021	
	Eucon W.O.	D	WRA-R	4 to 16	CADD-2011-01-017	
	Eucon SP	F	WRA-HR	12	CADD-2011-01-016	2 & 7
	Eucon RD-2	G	WRAR-HR	6 to 10	CADD-2011-01-014	2 & 7
	Eucon Air Mac12	AEA	AEA	0.1 to 4	CADD-2012-01-020	
	Euco Air-Mix	AEA	AEA	0.5 to 1	CADD-2011-01-012	1, 6
	Eucon AEA-92	AEA	AEA	0.5 to 1	CADD(2010)-01-021	1
	Eucon AEA 92S	AEA	AEA	0.5 to 2	CADD(2010)-01-034	1
	Euco Air-Mix 200	AEA	AEA	0.5 to 1	CADD(2008)-10	1
	Euco Air-Mix 250	AEA	AEA	0.75 to 1.5	CADD(2008)-11	1
	Eucon A+	A	WRA	3 to 8	CADD-2011-01-015	
	Eucon Pro-Finish	A	WRA	3 to 10	CADD(2009)-01	
	Eucon MR	A	WRA	4 to 10	CADD(2008)-13	
	Eucon WR	A	WRA	4	CADD(2010)-01-027	
	Eucon WR-75	A	WRA	2 to 3	CADD(2010)-01-014	
	Eucon WR-91	A	WRA	3.5 to 6	CADD(2010)-01-031	
	Eucon MRX	A & F	WRA/WRA-HR	3 to 12	CADD(2009)-02	
Eucon 37	A & F	WRA/WRA-HR	10 to 16	CADD(2010)-01-019	2	
Plastol Ultra 109	A & F	WRA/WRA-HR	2 to 12	CADD(2010)-02-043		
Plastol 341S	A & F	WRA/WRA-HR	2 to 10	CADD(2008)16		
Plastol 6200 EXT	A & F	WRA/WRA-HR	3 to 12	CADD(2010)-01-046		
Euco Accelguard 80	C & E	A/WRA-A	16 to 32	CADD(2010)-01-024		
Eucon DS	D	WRA-R	4 to 16	CADD(2010)-01-050		
Eucon Retarder 75	D	WRA-R	3 to 5	CADD(2010)-01-017		
Eucon Retarder 100	D	WRA-R	2 to 6	CADD(2010)-01-045		
Eucon WR	D	WRA-R	12	CADD(2010)-01-027		
Eucon 1037	F	WRA-HR	6 to 25	CADD(2010)-01-018	2, 7	
Plastol 5000	F	WRA-HR	3 to 10	CADD-2011-01-022		
Plastol 5500	F	WRA-HR	3 to 8	CADD(2010)-01-023		
Plastol 5700	A & F	WRA/WRA-HR	2 to 6	CADD(2010)-01-036		
Plastol 6400	A & F	WRA/WRA-HR	3 to 12	CADD-2010-01-025		
Plastol 6420	A & F	WRA/WRA-HR	2 to 10	CADD-2010-01-042		
W.R. Grace Construction Products Division 62 Whittemore Ave. Cambridge, MA 02140 Technical Services Support Denise White <a href="mailto:Denise.i.white@grace.com">Denise.i.white@grace.com</a> 617-498-4555	Daravair AT30	AEA	AEA	0.25 to 3	CADD(2008)-06	1
	Davavair 1000	AEA	AEA	0.75 to 3	CADD(2007)-04	1
	Darex AEA ED	AEA	AEA	0.50 to 5	CADD-2011-02-012	1
	Darex AEA	AEA	AEA	0.50 to 3	CADD(2009)-42	1
	Darex II AEA	AEA	AEA	0.50 to 5	CADD(2007)-03	1
	Daracem 50	A	WRA	3 to 9	CADD-2010-01-044	
	Daracem 65	A	WRA	3 to 9	CADD(2007)-08-05	
	WRDA 82	A	WRA	3 to 6	CADD(2009)-045	
	WRDA w/HYCOL	A	WRA	3 to 6	CADD(2008)-23	
	Zyla 620	A	WRA	2 to 4	CADD-2010-01-032	
	Zyla 630	A	WRA	2 to 7	CADD-2010-01-035	
	Zyla 640	A	WRA	3 to 5	CADD-2012-01-019	
	ADVA XT2	A	WRA	2 to 10	CADD-2012-01-015	
	Zyla 610	A & D	WRA/WRA-R	2 to 10	CADD-2011-01-002	

PRODUCER	TRADE NAME	TYPE	CODE	RECOMMENDED DOSAGE RATE	NTPEP NUMBER	NOTE
	WRDA 35	A & D	WRAWRA-R	2 to 8	CADD(2009)-44	
	WRDA 64	A & D	WRAWRA-R	3 to 6	CADD-2011-01-001	
	WRDA Pave 17	A & D	WRAWRA-R	3 to 10	CADD-2011-01-011	
	WRDA Pave 18	A & D	WRAWRA-R	3 to 5	CADD-2011-01-009	
	Mira 62	A & F	WRA/WRA-HR	2 to 15	CADD(2009)-06	
	Mira 85	A & F	WRA/WRA-HR	3 to 12	CADD(2009)-43	15
	Mira Pave 11	A & F	WRA/WRA-HR	6 to 15	CADD-2011-01-007	
	Daraset 200	C	A	10 to 60	CADD(2009)-41	2 & 7
	Daraset 400	C	A	10 to 60	CADD(2009)-46	
	Daraset Pave 20	C	A	10 to 60	CADD-2011-01-005	
	Polarset	C	A	8 to 50	CADD(2007)-08-01	
	Daratarad 17	D	WRA-R	2 to 8	CADD(2007)-05	
	Recover	D	WRA-R	5	CADD(007)-08-03	
	Zyla R	D	WRA-R	2 to 8	CADD-2012-01-026	
	Daracel	E	WRA-A	8 to 40	CADD(2009)-40	13
	Lubricon NCA	E	WRA-A	27 to 64	CADD(2007)-08-03	
	ADVA 120	F	WRA-HR	3 to 10	CADD-2010-01-037	
	ADVA 170	F	WRA-HR	3 to 9	CADD(2007)-08-06	
	ADVA 190	F	WRA-HR	3 to 9	CADD(2007)-01	
	ADVA 195	A & F	WRA/WRA-HR	3 to 15	CADD 2010-01-043	
	ADVA 140M	A & F	WRA/WRA-HR	9 to 16	CADD(2007)-06	
	ADVA 405	A & F	WRA/WRA-HR	4 to 18	CADD(2009)-07	
	ADVA 455	A & F	WRA/WRA-HR	8 to 22	CADD-2012-01-014	
	ADVA Cast 530	F	WRA-HR	3 to 10	CADD(2009)-10	
	ADVA Cast 575	F	WRA-HR	2 to 10	CADD(2007)-02	
	ADVA Cast 555	F	WRA-HR	6 to 20	CADD(2008)-08	
	ADVA Flex	F	WRA-HR	4 to 14	CADD-2010-01-038	
	EXP 950	F	WRA-HR	2 to 10	CADD(2007)-08-07	
	Daracem 100	G	WRAR-HR	12 to 15	CADD-2010-02-026	
Hunt Process Corp. South P. O. Box 688 Ridgeland, Mississippi 39158	Air-In XT HPS-R	AEA A & D	AEA WRAWRA-R	0.50 4 to 8	CADD-2010-02-031 CADD-2010-02-033	1,6
BASF Admixtures, Inc. 23700 Chagrin Blvd. Cleveland, Ohio 44122 Attn: Mark Piechuta <a href="mailto:Mark.piechuta@basf.com">Mark.piechuta@basf.com</a>	MasterAir AE 400 MasterAir AE 90 MasterAir VR 10 MasterAir AE 200 MasterPolyHeed N MasterPozzoloth 200 MasterPozzoloth 322 Masterpave MasterPozzoloth 80 MasterPozzoloth 700 MasterGlenium 3030 MasterGlenium 3400 MasterGlenium 7500 MasterPolyHeed 997 MasterPolyHeed 1020 MasterPolyHeed 1025 PS 1466 MasterGlenium 7511 MasterSet AC 534 MasterPolyHeed 100 MasterSet FP 20 MasterSet AC 122 MasterSet DELVO MasterSet R 100 MasterSet R 122 MasterSet R 961 MasterSet R 300 MasterGlenium 7101 MasterGlenium 7700 MasterGlenium 7710 MasterRheobuild 1000 MasterSure Z 60(formerly Rheotec Z 60)	AEA AEA AEA AEA A A A A & D A & D A & D A & F A & F A & F A & F A & F A & F A & F A & F A & F C A, C, E C & E C & E D D D D D F F F F S	AEA AEA AEA AEA WRA WRA WRA WRAWRA-R WRAWRA-R WRAWRA-R WRAWRA-HR WRAWRA-HR WRAWRA-HR WRAWRA-HR WRAWRA-HR WRAWRA-HR WRAWRA-HR WRA WRA/A/WRA-A A/WRA-A A/WRA-A WRA-R WRA-R WRA-R WRA-R WRA-R WRA-HR WRA-HR WRA-HR WRA-HR SP	0.25 to 4 0.25 to 4 0.25 to 4 0.125 to 4 4 to 9 3 to 5 4 to 7 5 to 10 5 to 10 3 to 7 10 to 25 2 to 12 2 to 15 5 to 15 3 to 12 3 to 13 2 to 10 3 to 15 10 to 45 8 to 30 5 to 60 16 to 64 1 to 20 1 to 5 3 to 5 3 to 5 3 to 5 3 to 12 2 to 15 2 to 15 15 2 to 12	CADD-2011-02-014 CADD-2011-01-035 CADD(2008)-17 CADD-2011-01-036 CADD(2010)-01-012 CADD-2011-01-039 CADD(2010)-01-008 CADD(2010)-01-005 CADD(2010)-01-005 CADD-2012-01-001 CADD-2011-01-033 CADD-2011-01-034 CADD-2012-01-008 CADD-2011-02-005 CADD(2010)-02-002 CADD(2010)-02-003 CADD-2011-01-040 CADD-2012-01-010 CADD-2011-02-006 CADD-2012-01-004 CADD-2011-02-013 CADD(2010)-01-006 CADD(2008)-18 CADD-2011-01-038 CADD-2010-02-015 CADD-2012-01-003 CADD(2010)-01-007 CADD(2007)-08-13 CADD-2012-01-009 CADD(2009)-11 CADD-2011-02-007 CADD(2009)-39	1 1 1, 6 1 1 15 15 12

PRODUCER	TRADE NAME	TYPE	CODE	RECOMMENDED DOSAGE RATE	NTPEP NUMBER	NOTE	
Sika Corporation 201 Polito Ave. Lyndhurst, New Jersey 07071 201-933-8800 Contact: Nate Artman artman.nathaniel@us.sika.com 330-495-0109	Sika AEA 14	AEA	AEA	1 to 3	CADD(2006)-08-7		
	Sika Air	AEA	AEA	0.50 to 3	CADD 06-04		
	Sika Air 260	AEA	AEA	0.1 to 6	CADD(2009)-15		
	Sika Air 360	AEA	AEA	0.1 to 6	CADD(2009)-16		
	Plastocrete 100	A	WRA	2 to 6	CADD-2012-01-018		
	Plastocrete 10N	A	WRA	1.5 to 5	CADD(2009)-13		
	SikaPlast 300GP	A	WRA/WRA-MR	2 to 20	CADD(2009)-21		
	Plastocrete 161	A & D	WRA/WRA-R	2 to 6	CADD-2012-01-012		
	Sikament 686	A & F	WRA/WRA-HR	3 to 12	CADD(2006)-08-3		
	Sikament AFM	A & F	WRA/WRA-HR	5 to 12	CADD(2006)-08-2		
	Sika ViscoCrete 1000	A & F	WRA/WRA-HR	3 to 18	CADD-2012-01-021		
	Sika ViscoCrete 2100	A & F	WRA/WRA-HR	2 to 6	CADD 06-05		
	Sika ViscoCrete 4100	A & F	WRA/WRA-HR	3 to 8	CADD(2008)-03		
	Sika ViscoCrete 6100	A & F	WRA/WRA-HR	3 to 8	CADD(2006)-08-8		
	Sikaplast 500	A & F	WRA/WRA-HR	3 to 18	CADD(2008)-20		
	Sikaplast 200	A & G	WRA/WRAR-HR	3 to 24	CADD(2009)-19		
	Sika Rapid 1	C	A	8 to 48	CADD(2006)-08-4		
	SikaSet NC	C & E	A/WRA-A	10 to 45	CADD 06-08		
	SikaSet RHE	C & E	A/WRA-A	5 to 60	CADD(2009)-25		
	Plastiment	D	WRA-R	2 to 6	CADD 06-06		
	Plastiment ES	D	WRA-R	2 to 4	CADD(2010)01-003		
	SikaTard 440	D	WRA-R	2 to 8	CADD-2011-02-002		
	Sikament SPMN	F	WRA-HR	10 to 40	CADD(2009)-23		
	Chryso, Inc 1611 Hwy 278 Rockwell, TX 75032 Attn: Brian Breitzman 972-772-6010 ext. 203 Cell 214-458-1053	Air R2	AEA	AEA	0.50 to 4	CADD(2010)-01-061	
		Chryso Air 260	AEA	AEA	0.20 to 3	CADD(2010)-01-052	
		Chryso EnviroMix 159	A	WRA	3 to 12	CADD(2010)-01-053	
		Chryso EnviroMix 300	A	WRA	3 to 12	CADD(2010)-01-066	
		Chryso EnviroMix 340	A	WRA	4 to 14	CADD(2010)-01-064	
		Chryso EnviroMix 728	A	WRA	5 to 18	CADD(2010)-01-058	
		Plast 209	A	WRA	3 to 8	CADD-2011-01-027	
Fluid Premia 180		A & F	WRA/WRA-HR	3 to 8	CADD(2010)-01-062		
Plast P150		A & D	WRA/WRA-R	3 to 8	CADD-2011-01-029		
Fluid Premia 196		A & F	WRA/WRA-HR	5 to 20	CADD(2010)-01-067		
Chryso TurboCast 701		C	A	10 to 90	CADD-2011-01-025		
Chryso TurboCast 650A		C	A	7.5 to 54	CADD(2010)-01-063		
Chryso TurboCast NCT		C	A	7.5 to 54	CADD-2011-01-024		
Chryso Tard 100R		D	WRA-R	2 to 8	CADD-2011-01-028		
Chryso Fluid Propel AG		A & F	WRA/WRA-HR	3 to 16	CADD-2011-01-032	2, 7	
Chryso Fluid Premia 203		A, F & G	WRA/WRA-HR	3 to 20	CADD(2010)-01060		
Chryso Fluid Optima 100		A & G	WRA/WRAR-HR	3 to 30	CADD-2011-01-031		
Chryso Fluid Optima 126		A & F	WRA/WRA-HR	3 to 20	CADD-2011-01-030		
Chryso Fluid Optima 256		F	WRA-HR	7 to 16	CADD(2010)-01-051		
Goulston Technologies, Inc. P. O. Box 5025 Monroe, NC 28110 John Howell 706-614-3052 jhowell@goulston.com		Chupol FA-10G	AEA	AEA	0.5 to 2	CADD-2010-02-018	
	Chupol AE-200G	AEA	AEA	0.5 to 2	CADD-2010-02-019		
	Chupol N20	A & D	WRA/WRA-R	3 to 8	CADD-2010-02-012		
	Chupol N60	A & F	WRA/WRA-HR	2 to 9	CADD-2010-02-008		
	Chupol NCA Plus	C & E	A/WRA-A	16 to 90	CADD-2010-02-001		
	Chupol N30	D	WRA-R	3 to 6	CADD-2010-02-011		
	Chupol N40	D	WRA-R	1 to 12	CADD-2010-02-010		
	Chupol N50	D	WRA-R	3 to 9	CADD-2010-02-009		
	Chupol P-500	F	WRA-HR	3 to 9	CADD-2010-02-007		
	Chupol P-530	F	WRA-HR	3 to 9	CADD-2010-02-006		

Type	Code	Description
Type A	WRA	Normal Water Reducer
Type C	A	Accelerator
Type D	WRA-R	Water Reducer Retarder
Type E	WRA-A	Water Reducer Accelerator
Type F	WRA-HR	High Range Water Reducer
Type G	WRAR-HR	High Range Water Reducer Retarder
Type S	SP	Specific Performance

**NOTES**

Dosage rates refer to either one bag or 100 lbs of cementitious material

All dosages shown are producer's recommended dosage rates.

Note 1: Adjustment should be made in the recommended dosage rates to obtain the desired amount of entrained air (4.5% +/- 1.5%).  
The amount required must be determined by test.

Note 2: This agent may be used with a Type A or Type D admixture if approved by the producer, at a rate to obtain the desired concrete workability and slump. Also, it may be added a second or third time to return the concrete to a workable slump.

Note 3: Normally as an air entraining agent, only a neutralized vinsol resin should be used with this product.

Note 4: 2oz/100 lbs below 65 degrees Fahrenheit, 3oz/100 lbs 65 degrees Fahrenheit to 85 degrees Fahrenheit, 4oz/100 lbs above 85 degrees Fahrenheit.

Note 5: This is a dry weight and not a liquid measurement and is non-chloride.

Note 6: This is a known neutralized vinsol resin.

Note 7: This agent may be re-dosed twice. The amount may be varied to get the desired results.

Note 8: This agent may be used with Type C or E admixture, if approved by the manufacturer.

Note 9: The agent to be remixed after long storage periods.

Note 10: Shelf life is one year.

Note 11: Shelf life is nine months.

Note 12: Approved by Policy 32 as a Mixer Wash Water Stabilizer.

Note 13: This product contains calcium chloride.

Note 14: Where water reduction is not required, less amounts may be used to aid in acceleration as required for job situations.

Note 15: Mid range Water Reducer.

SCDOT CONTACT PERSON: Aly A. Hussein, PhD, PE  
Structural Materials Engineer  
South Carolina Department of Transportation  
P. O. Box 191  
Columbia, SC 29202  
Telephone (803) 737-6687  
Fax (803) 737-6649  
email; [husseinaa@scdot.org](mailto:husseinaa@scdot.org)