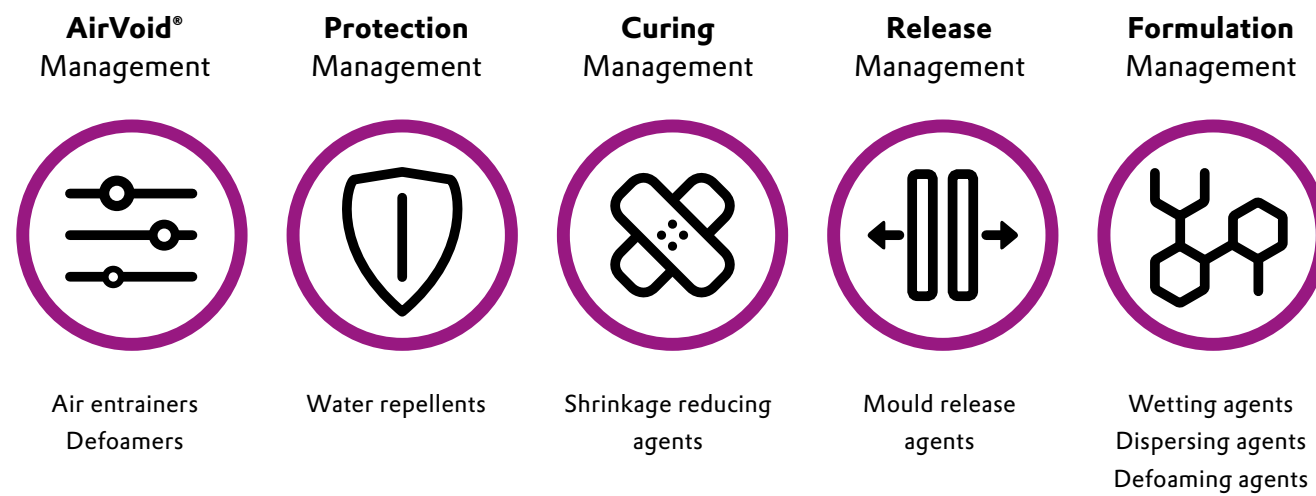


At a glance.

Process and Performance Additives for the concrete admixture industry



SITREN® SITREN AirVoid® TEGOSIVIN®

All five management systems and their associated activities and products address the two following areas of application:

- **Admixtures**, additives for concrete
- **Industrial building materials**, additives for e.g. insulating materials and fillers

We understand our customers' challenges, including the requirements their products have to meet, and their manufacturing processes. In addition, we offer a broad product portfolio, extensive experience and specialized technical expertise, plus our in-depth knowledge of applications and markets.

At the same time, we are dedicated to protecting the environment, and to sustainable socioeconomic development. With more than thirty years' experience in product design, we continuously improve and evolve our products. **As a result, our solutions set new standards in terms of efficiency and performance.**



<https://www.evonik.com/construction-chemicals>

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Europe | Middle East | Africa

EVONIK OPERATIONS GMBH
Goldschmidtstr. 100
45127 Essen
Germany
PHONE +49 201 173-2665
FAX +49 201 173-1990
www.evonik.com

Asia | Pacific

EVONIK SPECIALTY CHEMICALS CO., LTD.
55, Chungong Road
Xinzhuang Industry Park
Shanghai, 201108
PR China
PHONE +86 21 6119-1125
FAX +86 21 6119-1406

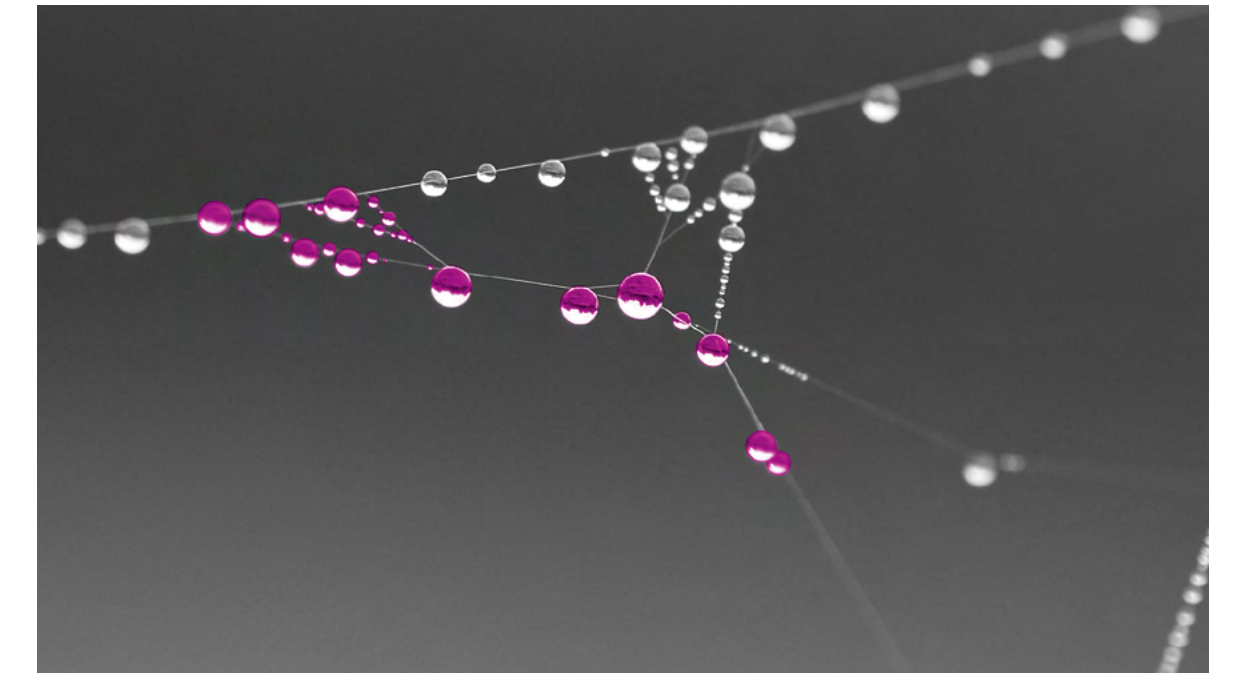
The Americas

EVONIK CORPORATION
7801 Whitepine Road
Richmond, VA 23234
USA
PHONE +1 804 727-0700
FAX +1 804 727-0855

MIXED TO RESIST.

Liquid additives for the concrete admixture industry

Product portfolio and applications



SITREN®

SITREN AirVoid®

TEGOSIVIN®

EVONIK
Leading Beyond Chemistry

EVONIK
Leading Beyond Chemistry

	AIR VOID MANAGEMENT						
	DEFOAMER						
	SITREN AirVoid® 305	SITREN AirVoid® 307	SITREN AirVoid® 312	SITREN AirVoid® 320	SITREN AirVoid® 321	SITREN AirVoid® 322	SITREN AirVoid® 325
CHEMICAL NATURE	Nonionic surfactant	Emulsion of organo-modified siloxanes	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant
SOLID CONTENT in %	100	20	100	100	100	100	100
DOSAGE in %	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer	0.1–1.0 by weight of superplasticizer
PRODUCT PROPERTIES							
Air entrainment							
Workability	++	+	++	++	++	++	+
Defoaming	++++	++	+++	+++	+++	++++	++++
Compatibility	++	++	+++	+++	+++	+++	++
Surface appearance	++++	+++	+++	+++	+++	+++	+++
Dispersing effect	+++		+++	+++	+++	+++	+++
Wettability	++++		+++	+++	+++	+++	+++
Improvement of mechanical properties	++++	+++	++++	++++	++++	++++	++++
Durability	++++	++++	++++	++++	++++	++++	++++
Yield efficiency							
Improved insulating properties							
Freeze-thaw resistance							
Efflorescence control							
Hydrophobic effect							
Beading effect							
Dilution stability							
Shrinkage reduction							
Low bending							
Release properties							
Corrosion protection							
PRODUCT BENEFITS							
					+ suitable	++ good	+++ very good
						+++ very good	++++ optimal
							++++ excellent
Polycarboxylate ether (PCE)	•••	•	•••	•••	•••	•••	•••
Lignosulphonate	•••	••	•••	••	••	••	•••
Sulphonated naphtalene formaldehyde (SNF)	••	•••	••	••	••	••	•••
Sulphonated melamine formaldehyde (SMF)	••	•••	•••	••	••	••	•••
Blends (e.g. PCE – lignosulphonate)	•••	••	•••	••	••	••	•••
						• suitable	••• highly recommended

	AIR VOID MANAGEMENT	PROTECTION MANAGEMENT			CURING MANAGEMENT			RELEASE MANAGEMENT	
	AIR ENTRAINER	WATER REPELLENTS			SHRINKAGE REDUCER			MOLD RELEASE	
	SITREN AirVoid® 601	TEGOSIVIN® HE 328	TEGOSIVIN® CA 880	TEGOSIVIN® CA 320	SITREN® SRA L 210	SITREN® SRA L 220	SITREN® SRA L 201	SITREN® MR 870	SITREN® MR 871
CHEMICAL NATURE	Blend of anionic surfactants	Emulsion of organo-modified silane/siloxanes	Emulsion of organo-modified siloxanes	Emulsion of organo-modified silane/siloxanes	Modified polyether	Modified polyether	Modified polyether	Emulsion of vegetable oils	Emulsion of vegetable oils
SOLID CONTENT in %	35	50	60	50	100	100	100	58	58
DOSAGE in % or g/m ²	0.01–0.5% by weight of cement	0.1–1.0% by weight of cement	0.1–1.0% by weight of cement	0.1–1.0% by weight of cement	0.5–3.0% by weight of cement	0.5–2.5% by weight of cement	0.5–2.5% by weight of cement	10–18 g/m ²	10–18 g/m ²
LOW VOC EMISSION					++++	++++	+++		
PRODUCT PROPERTIES									
Air entrainment	++++				++				
Workability	++++								
Defoaming									
Compatibility									
Surface appearance	++							++++	++++
Dispersing effect	+++				++	++	++		
Wettability	++				+++	+++	+++		
Improvement of mechanical properties									
Durability	++++	++++	++++	++++	++++	++++	++++	++++	++++
Yield efficiency	++++								
Improved insulating properties	++++	++++	++++	++++					
Freeze-thaw resistance	++++	+++	++	++					
Efflorescence control		++++	+++	+++					
Hydrophobic effect		++++	+++	+++					
Beading effect		+++	+++	+++					
Dilution stability				++++					
Shrinkage reduction					+++	++++	+++		
Low bending						++	++++		
Release properties								++++	++++
Corrosion protection								++	++++
APPLICATION AREAS									
								+ suitable	++ good
								+++ very good	++++ optimal
								++++ excellent	
In-situ concrete / Readymix concrete									
Standard / Structural concrete	■	■	■	■	■	■	■	■	■
Lightweight concrete	■	■	■	■	■	■	■	■	■
Precast or prefabricated concrete									
Standard / Structural concrete	■	■	■	■	■	■	■	■	■
Lightweight concrete	■	■	■	■	■	■	■	■	■
Paver and bricks									
Semi-dry concrete	■	■	■	■	■	■	■	■	■
Wetcast concrete	■	■	■	■	■	■	■	■	■
Concrete screeds									
Concrete screeds	■	■	■	■	■	■	■	■	■
Flowable screeds	■	■	■	■	■	■	■	■	■
Special concrete									
HPC/UHPC ([ultra] high performance concrete)	■	■	■	■	■	■	■	■	■
Architectural concrete	■	■	■	■	■	■	■	■	■
Air entrained concrete	■	■	■	■	■	■	■	■	■
Self-compacting concrete	■	■	■	■	■	■	■	■	■
Reinforced concrete	■	■	■	■	■	■	■	■	■
Prestressed concrete	■	■	■	■	■	■	■	■	■