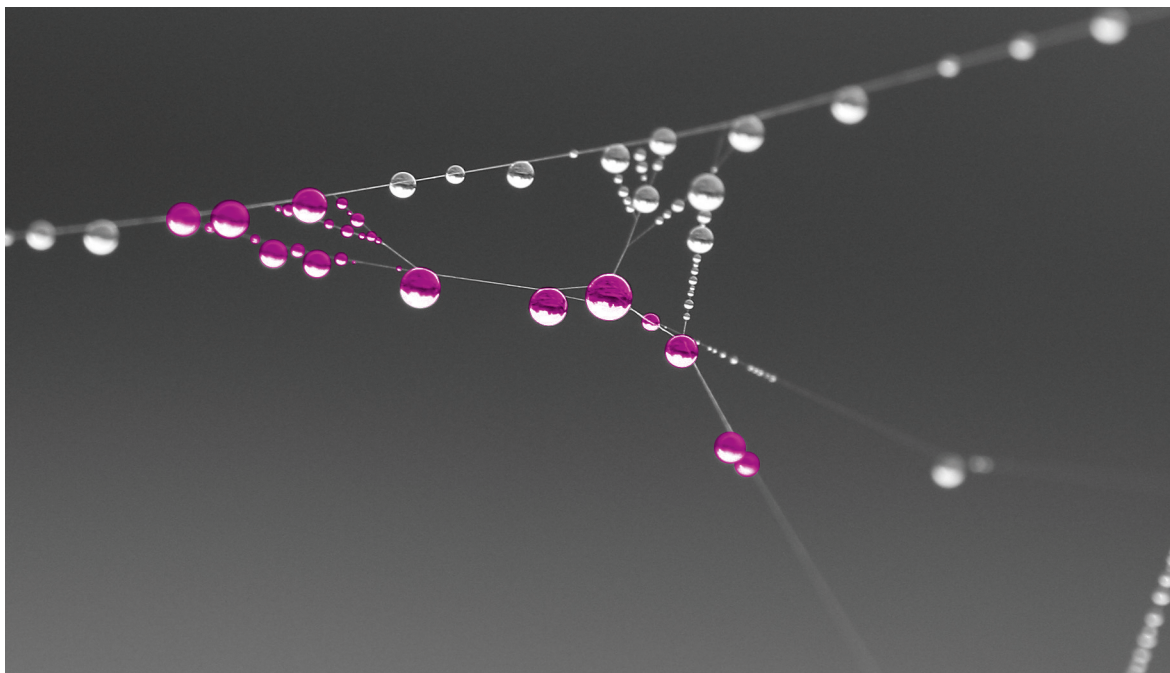


MIXED TO RESIST.

Liquid additives for the concrete admixture industry

Product portfolio and applications



SITREN®

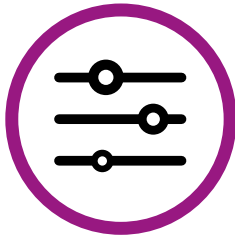
SITREN AirVoid®

TEGOSIVIN®

At a glance.

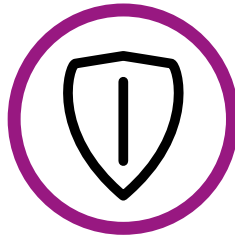
Process and Performance Additives for the concrete admixture industry

AirVoid®
Management



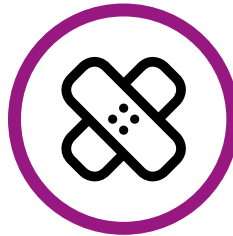
Air entrainers
Defoamers

Protection
Management



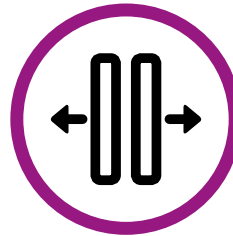
Water repellents

Curing
Management



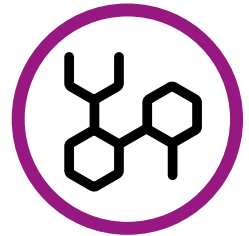
Shrinkage reducing
agents

Release
Management



Mould release
agents

Formulation
Management



Wetting agents
Dispersing agents
Defoaming agents

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.**

	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	SITREN AirVoid® 330	SITREN AirVoid® 332	
CHEMICAL NATURE	Nonionic surfactant	Emulsion of organomodified siloxanes	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	Nonionic surfactant	
SOLID CONTENT in %	100	20	100	100	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	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	++++ 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/m²	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/m²	10–18 g/m²
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								████████████████	

████████ suitable

Further product recommendations are available on request.



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

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