

Off the shelf solutions for all cement types:

	Slag	Limestone	Pozzolan
High	CEM II/C, CEM III/B All ages strength EnviroAdd® EL All-ages Strength Activator	CEM II/C All ages strength EnviroAdd® LD Superior Low Dosage Activators EnviroAdd® EL All-ages Strength Activator	CEM II/C-M, LC3 All ages strength + water demand reduction EnviroAdd® HWR Superior Cement Water Reducers
Medium	CEM III/A All ages strength Opteva® EL All-ages Strength Activator	CEM II/B-L, CEM II/B-M, CEM II/A-L 52.5 R Late age strength EnviroAdd® LD Superior Low Dosage Activators EnviroAdd® EL All-ages Strength Activator	CEM II/B-P, CEM II/B-V, CEM II/B-Q All ages strength EnviroAdd® LD Superior Low Dosage Activators EnviroAdd® EL All-ages Strength Activator
Low	CEM II/A-S Early age strength Opteva® E Chloride-based Activators	CEM II/A-L Late age strength Opteva® L Late Strength Activators	CEM II/A-P, CEM II/A-V, CEM II/A-Q All ages strength Opteva® WR Non-chloride, High Dosage Activators Opteva® EL All-ages Strength Activator

High
Medium
Low
Clinker substitution rate



Learn more about EnviroAdd™:



Chryso
 Saint-Gobain Tower • 12 Place de l'Iris
 92400 Courbevoie • FRANCE
www.chryso.com



EnviroAdd®
 Let's make your carbon footprint lighter



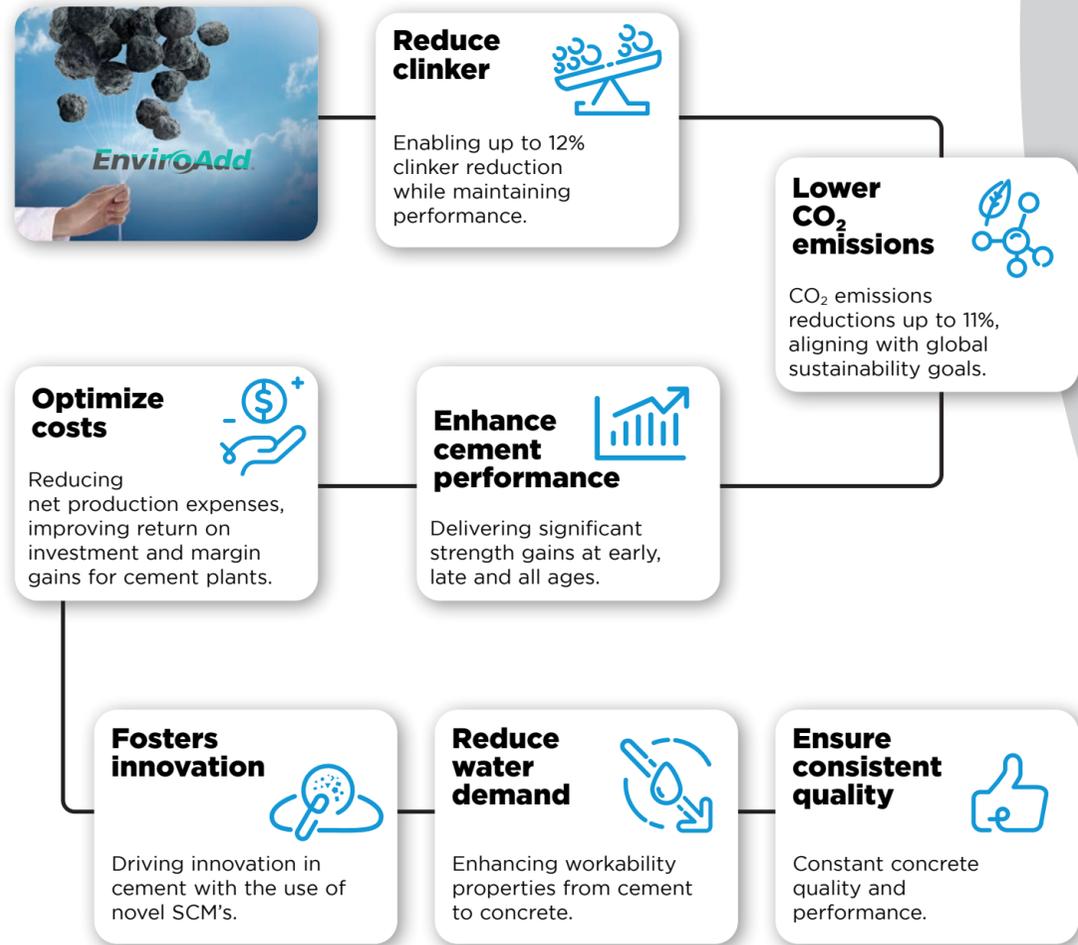
The challenge

Globally, cement is the backbone of construction, yet its production process faces critical challenges:

- Heavy reliance on clinker; higher costs & environmental impact
- Variable raw material quality, impacting durability & strength of concrete
- The need to drive innovation without impacting cement performance

EnviroAdd®: A game-changing solution

Leveraging innovative, tailor-made, and advanced chemistry.



Engineered for excellence

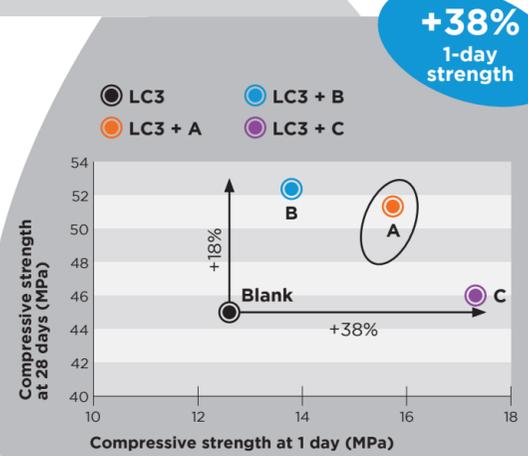
LC3

Status

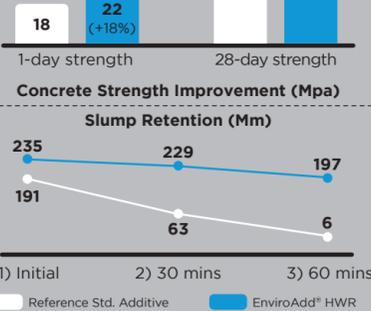
- Industrial trial with LC3-50 cement 30% calcined clay, 15% limestone

Results

- +38% at 1 day or + 5 MPa with EnviroAdd® EL “C”
- +18% at 28 days or + 8 MPa with EnviroAdd® EL “B”
- Customized EnviroAdd® EL “A” met cement plant’s target performance at all ages



+3,000% Slump retention (60 min)



Status

- Cement Type 1P with 35% Calcined Clay
- EnviroAdd® HWR tested at equal concrete admixture dosage

Results

- EnviroAdd® HWR unlocks +22% strength gains while preserving workability for a long period, retaining 200 mm slump at 60 minutes.

Water Reduction

Concrete

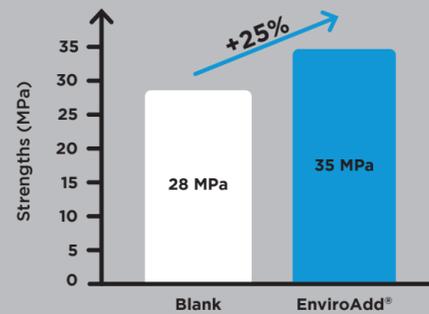
Status

- Concrete cured at 10°C with a constant water-to-cement ratio of 0.38.
- Same admixture and equal 100 mm slump at 45 minutes between both samples.

Results

- EnviroAdd® activators boosted early strength in concrete, outperforming traditional activators. Concrete strengths at 24 hours: +25% at 1 day when cured at 10°C.

Concrete strengths at 24 hours; Curing at 10°C



-9.6% CO2

Core solutions

Customized for all cement needs

Superior all ages Strength Activators

EnviroAdd® EL

Superior strength enhancer that boosts both early ages and 28 late days compressive strengths.

Cement Flowability / Pack set of cement	
Grinding performance	██████
1-3 day strengths	██████
28 day strengths	██████
Water demand reduction	██████

Benefits

- Superior early and late strength activation
- Setting acceleration

Low Dosage Activators

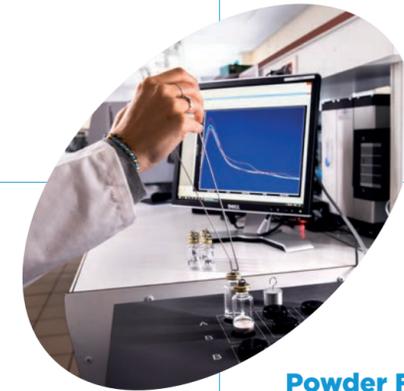
EnviroAdd® LD

Low dosage strength enhancer that boosts compressive strengths in cement.

Cement Flowability / Pack set of cement	
Grinding performance	██████
1-3 day strengths	██████
28 day strengths	██████
Water demand reduction	██████

Benefits

- 28 days strength activation
- Setting acceleration
- Workability retention



Superior Water Demand Reducers

EnviroAdd® HWR

High-performance water reduction and rheology control for SCM-rich cement and concrete systems.

Cement Flowability / Pack set of cement	
Grinding performance	██████
1-3 day strengths	██████
28 day strengths	██████
Water demand reduction	██████

Benefits

- Workability properties (Initial and over time)
- Strength performance
- Clinker factor reduction
- Compatibility with low-clinker binders

Powder Flowability Optimizers

EnviroAdd® PF

Designed to optimize the flow properties of dry cement powders, facilitating easier mixing and handling.

Cement Flowability / Pack set of cement*	
Grinding performance	██████
1-3 day strengths	██████
28 day strengths	██████
Water demand reduction	██████

*Mastering excess cement powder fluidity
*Preventing mill flushing / dusting

Benefits

- Optimized cement handling
- Dust reduction
- Strength activation