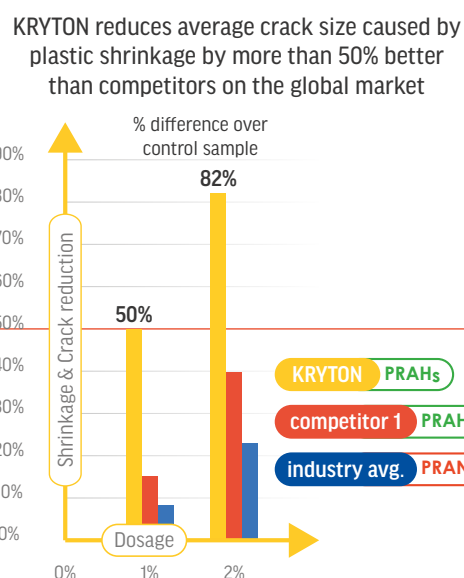
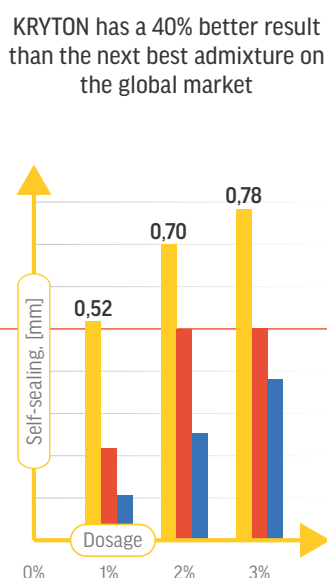
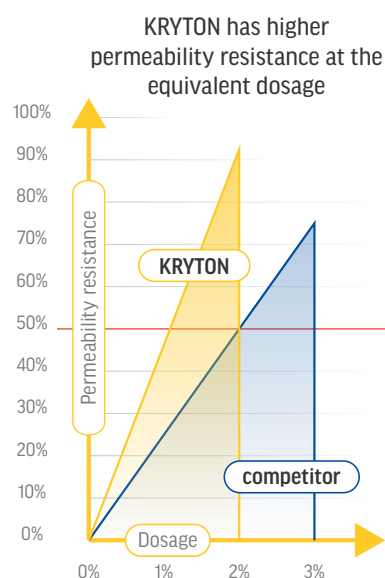


Technical advantages

Key factors in comparing waterproofing systems

Criteria	Classic white tank (bath) Watertight concrete + crack control design - cracks <0.1mm	PRAN - Hydrophobic concrete admixtures - dampproofing (moisture protection)	PRAH - Hydrophilic concrete admixtures - crystallization waterproofing
Working principle	Reinforcement and concrete design and implementation to minimize cracks to ≤ 0.1 mm	Hydrophobic crystallization admixtures and pore blockers to reduce water permeability	Hydrophilic crystallization admixture remains reactive in contact with water throughout the entire service life of concrete
Cracks control	Critical – up to 0.1 mm	Filling cracks - tamponing up to 0.4 mm (one-time)	Reduction and self-sealing of cracks up to 0.5 mm, KRYTON up to 0.7 mm, entire service life of concrete
Self-healing	None	None, only initially, maximum up to 0.4 mm	Yes, active throughout the entire service life, up to 0.5 mm
Maintainability (repair costs)	Repair is part of the system	Repair remains part of the system	Rare repairs – by exception only
Design and reinforcement	High requirements: concrete $\geq$ C30/37, thickness $\geq$ 250 mm, serious emphasis on reinforcement, coatings and joints	Serious requirements – Hydrophobic crystallization admixtures do not fully compensate for cracks	The properties of the PRAH additives fully meet the Eurocode criteria for crack design and sizing. Reduction and sealing of cracks up to 0.5 mm, long-term
Water pressure	Up to ~30 m water column	Theoretically 4-14 m; in practice, for non-loaded structures.	Up to 120 m water column
Implementation costs	Additional costs arise from crack control design which involves increased reinforcement and cross-sectional dimensions of elements – on average, a 20% increase in concrete volume and a 34% increase in reinforcement.	Additional +10-15% costs compared to the Classic white tank (bath) system	Same as white tank (bath). Material costs (+15-20%) are offset by the reduced quantities of concrete and reinforcement compared to the classic white tank system, while also providing long-term savings on maintenance and repairs
Recommended application	Underground garages, basements; no critical water conditions and no hydrostatic pressure	Interior environments with no hydrostatic load	Critical areas: reservoirs, pools, hydraulic structures

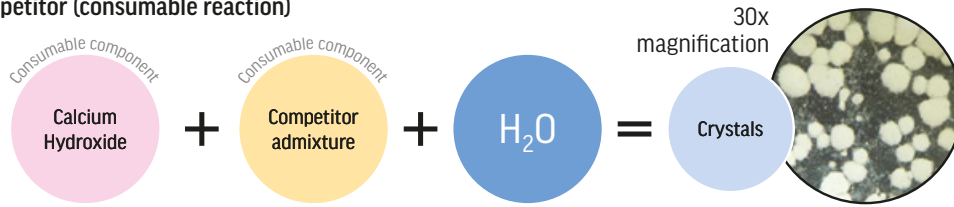


Waterproofing
Dampproofing

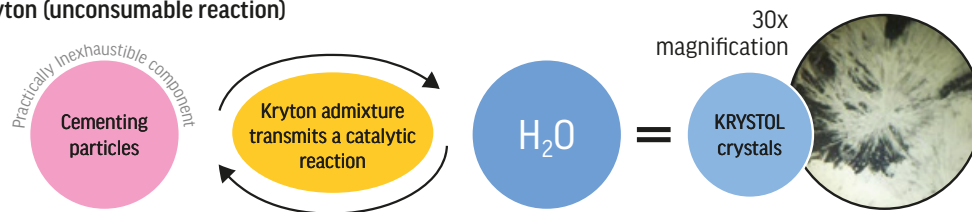
Different chemical composition

KRYTON products act as a catalyst. They affect concrete throughout its entire life.

Competitor (consumable reaction)



Kryton (unconsumable reaction)



Corrosion protection



University of Hawaii evaluated performance of corrosion inhibiting admixtures in a marine environment

Reinforced concrete panels were exposed to a tidal zone and resistance to corrosion was evaluated over 10 years.

KRYTON performed well over a 10 year period and was recommended by the University of Hawaii to reduce corrosion in marine environment.



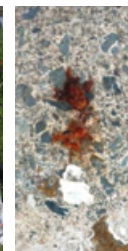
Control



Anticorrosion admixture



Hydrophobic PRAN admixture



KRYTON

Successful results

