

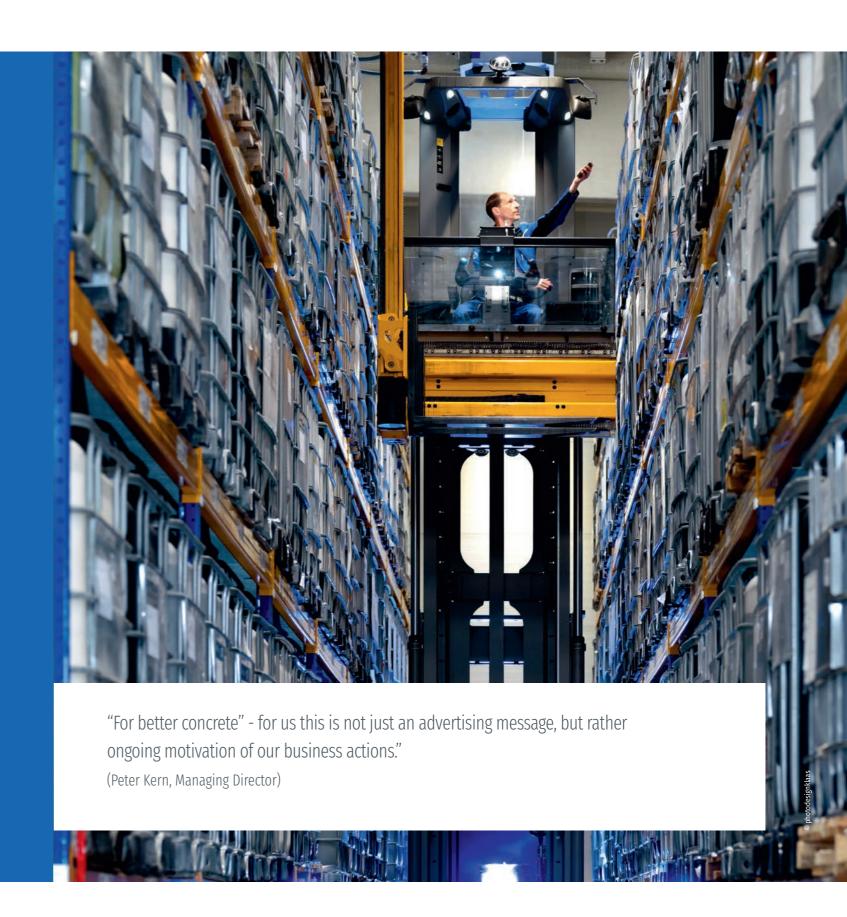


CONCRETE CHEMICALS

CONCRETE ADMIXTURES | SURFACE PROTECTION PRODUCTS
RELEASE AGENTS
CLEANING AND MAINTENANCE PRODUCTS
GRANULATE
ADMIXTURE DISPENSERS

INHALT

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RHEIN-CHEMOTECHNIK GMBH

Gewerbepark Siebenmorgen 8 53547 Breitscheid (Germany)

Phone.: +49 (0)2638 | 9317-0 Mail: info@rhein-chemotechnik.com Web: www.rhein-chemotechnik.com For better concrete.

WE ARE THE PARTNER FOR BUSINESSES IN THE CONCRETE INDUSTRY

Innovative concrete admixtures have become indispensable in modern concrete construction. They are increasingly shaping the technological development of concrete.

Since 1966, we have been developing and manufacturing concrete admixtures, surface protection products, concrete parting agents and cleaning and maintenance products for top-quality concrete products at our site in 53547 Breitscheid, Germany.

Our team of around 40 specialists works hard every day to offer you the best solution for your application every single time. We consider ourselves to be a project partner with the goal of refining your product or getting the most out of it. And if we should not find what you need in our extensive product range, we can also develop customized solutions.

Our experienced chemists and concrete technicians work hand in hand.

Thanks to the quality of our products and our extensive and competent service, we have remained your powerful and reliable partner for more than five decades.



1 TEAM | 3 SKILLS

Technical Consultation | Chemistry Laboratory | **Concrete Laboratory**

We have been your contact partner for all issues relating to concrete admixtures and surface protection products. In addition, our portfolio includes concrete parting agents as well as cleaning and care products for assets in the concrete processing industry. Our competence in the field of concrete chemistry is reflected in the consistently high quality of our products. Customers all over the world trust our expertise.

All products and services of Rhein-Chemotechnik GmbH are measured and evaluated in accordance with the specifications of a DIN EN ISO 9001 certified quality management system and are subject to a continuous development and improvement process.



Technical consultation

Experienced concrete engineers (VDB) and field service consultants at Rhein-Chemotechnik GmbH support you in selecting the right products. Our advice includes, among other things, the assessment of the intended application or the performance of suitability tests in the laboratory or at the plant.

If you have any operation-specific issues, we will also be happy to help you. You are assigned a permanent contact person for any question you might have about our product range.

Chemistry laboratory

Around 20% of our employees work in our research and development department. In addition to our own product developments, we work with you to develop individual and customer-specific solutions.

All concrete admixtures, which are used for unreinforced, reinforced, and prestressed concrete, used in turn for in-situ and ready-mixed concrete as well as for concrete for precast parts, comply with EN 934-2. The on-site production inspection process is certified and externally monitored by an independent inspection body (MPA NRW).

Concrete laboratory

Our colleagues in the chemical laboratory and concrete laboratory work hand in hand. In addition to the ongoing quality tests of our products, we carry out all required concrete tests with cutting edge measuring instruments and according to recognized international standards.

We are your partner for any project related to concrete technology.

DIN ISO 9001 certification

Rhein-Chemotechnik GmbH has been DIN ISO 9001 certified since 2014. All processes are subject to constant quality assessment and further development. This allows us to maintain the quality of our products across all manufacturing processes, starting with the selection of our raw materials and suppliers and all the way to delivery. That is our promise of quality.



at Rhein-Chemotechnik GmbH offers support ranging from the quality assessment of raw materials to recipe optimization and quality testing of finished concrete products. In addition, we advise on production adjustments to adapt to valid standards and new technologies.



OUR SERVICE

Professional service that is quickly available to every customer has always been an integral part of our performance. As a result, our comprehensive customer service offers additional benefits to customers that are reflected in maximum safety, quality and cost-effectiveness when using our products.

Application technology and concrete technology service

Close cooperation based on partnership is important to us. You are assigned a permanent contact person right from the start. Our expert team of chemists and concrete engineers is always there for you with professional knowledge.

Our specialists accompany you from the first idea to the finished product. Based on your requirement profile, we decide which products from our range are the best addition to your initial product, and thus achieve optimal results that meet the highest quality standards.

Product development and customization

Would you like to emphasize the unique character of your concrete products and set yourself apart from your competitors? For such needs as well, the experts at Rhein-Chemotechnik GmbH are your contact partner.

Together with you, we develop individual customer solutions that take into account the framework conditions of the entire manufacturing process and get the most out of your products.

We deliver our products in person

With our own modern vehicle fleet, we deliver our products to Germany, the Netherlands, Belgium, Luxembourg, and Switzerland. Benefit from short delivery times and our experience in handling suitable containers. In addition to delivery in IBCs or barrels, you can also receive larger quantities in bulk by tanker. We take back empty IBCs free of charge for recycling and further use – for the sake of the environment. For the same reason, all of our vehicles use modern AdBlue technology.

We look forward to your inquiry.

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OUR PHILOSOPHY

Common values - a common course

We are the third generation managing Rhein-Chemotechnik GmbH as a family business. We have been growing steadily as a company over the past fifty years. The values with which our founders built the company still shape our entrepreneurial activities today and build the basis of our corporate philosophy.

The concrete industry is constantly developing. We also pursue this idea of innovation and continue to develop all our products. Yet we can only do this with motivated and qualified employees. Our team has an interdisciplinary and progressive approach to work. We follow the same path - from the first idea to the finished product.

We are fully focused on the sustainable success of our customers, for whom we are a reliable partner. With all this mind, we do every best every single day.

The partnership relationship with our suppliers, customers and local institutions forms the basis of our daily activities. We are proud of that.

THE SIX PILLARS OF OUR ENTREPRENEURIAL ACTIVITY

QUALITY

When selecting our suppliers and raw materials, we rely on the highest quality. We continue this claim from the manufacture of our products to delivery across all process steps.

RELIABILITY

Reliability is an important part of top-quality work for us. Our employees, our customers and our suppliers can always rely on us.

CONTINUITY

We rely on long-term business relationships. Our employees enjoy working for us. Their competence lies in product optimization and constant research and development

FAIRNESS

Fairness is of particular importance to us. It begins with fair payment and ranges from gender equality to consistent top-quality products at honestly calculated prices.

RESPECT

Respectful mutual relationships are crucial to us. We value mutual respect between each individual and at any level of relations. We live with a positive and respectful attitude.

HONESTY

Honesty is the highest interpersonal good. We deal honestly with all relevant persons, regardless of how they relate to our company.



SUSTAINABILITY AND RESPONSIBILITY

Optimize processes and conserve resources

To make sure that our essential resources - people and the environment - are protected, sustainable thinking and behavior are the prerequisite of our daily work.

We have already developed guidelines and processes to save energy, water, and fuel already today and are constantly working on further expanding sustainable structures in the company. We generate the electricity we need proportionately from our own photovoltaic system, while empty IBCs can be returned to us and thus fed back into our packaging cycle. We also reuse our rinse water to the greatest possible extent.

It's the little things and the ideas of every single person that let us continue to grow together. Thanks to this creativity, we are able to constantly improve and expand our sustainability concept.

PRODUCT DEVELOPMENTS:

We know our raw material suppliers and comply with modern standards and fair conditions.

Our products are as highly concentrated so that they can be used effectively by customers.

Concrete admixtures and surface protection products increase the service life of manufactured products.

Our biodegradable litter granulate is a waste-saving packaging alternative for concrete block products. OPTIMIZED PRODUCTION SITE

We use energy-saving LED lamps almost everywhere in the com-

production site.

Internal logistics and material planning have been optimized thanks to modern technology.

We generate the bulk of the

electricity we need at our own

MODERN FLEET TECHNOLOGY

Our modern vehicle fleet helps us contribute to reducing emissions in the air. All vehicles comply with the EURO 6 standard and use AdBlue technology.

We avoid empty runs of our vehicles and optimize loading.

Our electric forklifts run on electricity generated in-house.

OUR CIRCULATORY SYSTEMS

We have developed recycling systems for many operations and production processes, which helps us save resources and contribute to protecting the environment.

Used IBCs are professionally cleaned and reused.

Rinse water is collected and reused to the greatest possible extent.

CONCRETE ADMIXTURES FOR THE CONCRETE-PRODUCTS INDUSTRY

PLASTICIZERS

PAVELITH® | PLASTOLITH | PERMACOLOR® | ALPHALITH®

We are pioneers in the development of plasticizers for earth-moist concrete for the production of high-quality directly demolded concrete block products in fully automatic production installations using the vibro-compaction and pressing process.

Our product advantages:

- > Accelerated and homogenized mold filling
- > Enhanced compact readiness
- > Increased green strength
- > Increased in density, strength, and durability
- > Reduced machine cycle times
- > Minimized material costs

The quality and profitability of concrete paving stones according to EN 1338, paving slabs according to EN 1339, curb stones according to EN 1340, concrete pipes, bricks and non-standard concrete components of all kinds can be significantly improved by using our plasticizers.

PAVELITH® CHARACTERISTICS FIELDS OF APPLICATION > higher water absorption paving stones PAVELITH® KB 100 > significantly better workability and greater > slabs is a highly effective plasticizer especially for the processing compactibility > curbstones of earth-moist concretes in high-quality concrete block improved filling properties > garden stones products and provides significantly improved properties of > increased strength > bricks made of pumice, LAVA, LECA or similar fresh and hardened concrete, as well as the possibility of > higher freeze-thaw resistance increased dosage of the mixing water. > cement savings of up to 10-15 % or higher share of pozzolanic additives possible > significantly improved appearance thanks to the closed concrete structure > improved filling action > concrete paving stones PAVELITH® KB 600 > dense concrete structure > curbstone is a highly effective plasticizer which provides top strength > improved cement hydration > paving slabs with a low cement content, especially in earth-moist > high strength at low cement content non-standard concrete components, such as grass > dense, visually appealing surfaces pavers, curbstones, garden slabs, angle stones, etc. > good side sealing > improved filling action > concrete paving stones PAVELITH® KB 606 BV > dense concrete structure > curbstones is a highly effective plasticizer which provides top strength > improved cement hydration > paving slabs with a low cement content, especially in earth-moist > top strength at low cement content > concrete components, such as grass pavers, concrete. > dense, visually appealing surfaces curbstones, garden slabs, angle stones, etc. > good side sealing dry Cast and direct formwork removal PAVELITH® AP 5 > high compaction PAVELITH® AP 5 is primarily used for the production > enhanced strength of concrete paving stones and curbstones to achieve is a special plasticizer designed for the production of con-> enhanced anti-adhesive effect excellent quality closed vertical side facings with crete products from earth-moist concrete. > good-quality closed vertical side facings noticeable streak formation and prevent adhesive > reduced efflorescence tendency bonding on machine stamps. These effects can also be taken advantage of in other concrete block products made of earthmoist concrete. > remarkable anti-adhesive effect > concrete paving stones PAVELITH® AP 10 > curbstones > provides optimal water content is a special plasticizer for the production of concrete block > dense, visually appealing surfaces grass pavers products with very dense and visually appealing concrete > improved frost and freeze-thaw resistance face mixes. Thanks to its outstanding anti-adhesive effect, > improved cement hydration PAVELITH® AP 10 allows for economic faces mixes and core > reduced tendency for efflorescence mixes with an optimum water-cement value for complete > economic use in core concrete and concrete hydration. face mixes

PLASTOLITH	CHARACTERISTICS	FIELDS OF APPLICATION
PLASTOLITH F is a high performance plasticizer for the production of high quality concrete products, like paving stones, curbstones etc.	synthetic plasticizer with internal curing by high water-retaining capacity decreases sticking at the machine stamp	 > paving stones, according to EN1338 > curbstones, according to EN1340 > slabs, according to EN1339 > building blocks, and further concrete products from zero-slump concrete
PLASTOLITH OptiCem® is a high performance admixture for optimisation of the cement content in zero-slump mixes for concrete products, such as pavers, kerbs, slab etc.	 gives a spontaneous and complete dispersion of all binder particles and fines in the mix improves the strength of the hardened binder and the adhesion between binder and aggregates reduces the internal friction of the mix and significantly improves compaction of zero-slump concrete mixes high early and final strength especially tensile and splitting tensile strength very low cement contents 	 > paving stones acc. to EN 1338 > slabs acc. to EN 1339 > kerbstones acc. to EN 1340 > lawn edgings etc.

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® Plasticizer 1 is a plasticizer with a purely synthetic active ingredient base with optimal effectiveness in zero slump concrete.	 higher early and final strength higher density higher freeze-thaw-resistance much better appearance due to the closed concrete structure, especially evident in large sized products improved processability and increased compactability no sticking to machine stamp, even when working with relatively moist mixtures 	 pavers cobblestones flags curbstones retaining walls landscaping products concrete bricks and blocks
ALPHALITH® Plastifizierer 2S is a highly effective plasticizer for earth-moist concretes and provides maximum strength with low cement content.	 causes spontaneous wetting and dispersion of all binder particles and fines in a mixture strongly promotes compaction results in a very dense concrete structure with high strengths Optimization of cement hydration high strengths at low cement contents 	 concrete paving stones curbstones paving slabs non-standard concrete components, such as grass pavers, curbstones, garden slabs, angle stones, etc.
ALPHALITH® Plastifizierer RW is a special plasticizer for the manufacturing of high- quality concrete products made of zero-slump concrete	 high compaction, high early and final strength minimized adhesion of the concrete to the machine stamp very good side finish reduction of efflorescence 	 concrete paving stones curbstones products from earth-moist concrete
ALPHALITH® Betonsteinadditiv WRA-10 is a special dispersing additive with high water-retaining properties for the production of high-grade concrete products with high density and durability from zero-	in face mix concrete: > homogenuous concrete surface with high density > and minimized amount of structural pores > minimized sticking of concrete at the tamper head > and minimized surface defects	in base mix concrete: high structural density and very good side finish high green strength

> and minimized surface defects

increased abrasion resistance

reduced efflorescence

increased freeze-thaw-resistance

> increased early- and final strength

> concrete paving stones, curbstones, flagstones > products made from earth-moist concrete

> reduced efflorescence

slump concrete. ALPHALITH® WRA-10 renders possible

the production of zero-slump concrete with an optimum

amount of water, high green strength, high density and

maximum grade of cement hydration.

PLASTICIZER WITH EFFLORESCENCE PROTECTION AND COLOR INTENSIFIER PERMACOLOR® | PLASTOLITH | COLORCRETE® | PAVELITH® Plasticizers with color intensifiers are used to manufacture colored concrete block products. Our plasticizers with efflorescence protection and color intensifier reinforce dyed concrete components: > Color brilliance > Durability > Attractive appearance Depending on the set of requirements, a selection of admixtures with specific properties is available. Our brand names PERMACOLOR®, PLASTOLITH, Colorcrete® and PAVELITH® stand for our consistently high product quality. Plasticizers from Rhein-Chemotechnik GmbH are used successfully all around the world and give concrete block products exceptional properties.

|--|

PLASTOLITH A

is a multi-functional special admixture used for the processing of earth-moist concrete into top-quality concrete products.

- > reduces efflorescence
- has strong plastification effect
- > higher density of concrete blocks
- > improves freeze/thaw resistance
- reduces capillary absorption of water or deicing salts
- reduces adhesive on machine stamps

Production of concrete block products from earthmoist concrete such as:

- paving stones in accordance with EN 1338, DIN 18501
- > curbstones in accordance with EN 1340
- > paving slabs in accordance with EN 1339
- > non-standardized concrete products

FIELDS OF APPLICATION PERMACOLOR® **CHARACTERISTICS**

PERMACOLOR® 2

has especially been developed for the improvement of colored concrete pavers being processed from zero-slump concrete.

- > reduced primary and secondary efflorescence improved color performance
- > reduced absorption rates
- better surface texture
- moist concrete such as:

Production of concrete block products from earth-

Production of concrete block products from earth-

Production of concrete block products from earth-

- > pavers
- > slabs
- > embankment stones
- palisades
- > and many others

PERMACOLOR® 3

has especially been developed for the improvement of coloured concrete pavers being processed from zero-slump concrete.

- > reduced primary and secondary efflorescence
- improved color performance reduced absorption rates
- increased early and final strength
- better surface texture
- moist concrete such as:
 - > pavers
 - > slabs
 - > embankment stones
 - palisades
 - and many others

PERMACOLOR® 4

has especially been developed for the improvement of coloured concrete pavers being processed from zero-slump concrete. The product is a combination of a powerful plasticizer with special waterproofing compounds for efflorescence control and reduced absorption.

- > reduced primary and secondary efflorescence
- > improved color performance
- reduced absorption rates

better surface texture

- increased early and final strength
- moist concrete such as:
 - > pavers
 - > slabs
 - embankment stones
 - > palisades
 - > and many others

Colorcrete® **CHARACTERISTICS** FIELDS OF APPLICATION

Colorcrete® 20

is a multi-functional admixture for the production of high-quality concrete products from earth-moist concrete

- > minimization of primary and secondary
- efflorescence
- > intensified color effect
- y good side and surface sealing
- greatly reduced tendency for sticking
- reduced water absorption

Production of concrete block products from earth-

moist concrete such as:

- pavers
- > curbs
- > slabs
- > embankment stones
- palisades
- and many others

PERMACOLOR® FIELDS OF APPLICATION **CHARACTERISTICS**

PERMACOLOR® 2000

considerably reduces efflores-cence and improves colour performance of concrete products manufactured from zero-slump concrete.

- reduced calcium-carbonate efflorescence and
- iron-based efflorescence/discoloration
- improved colour performance
- diminished sticking of concrete at the machine
- good surface finish
- Production of concrete block products from earth-
 - > pavers
 - slabs
 - > retaining-wall Blocks

moist concrete such as:

- > gardening and landscaping products
- and many others

PERMACOLOR® 2010

PERMACOLOR® 2025

is a special multi-functional admixture for the production of high quality concrete products from zero-slump concrete.

is a special multi-functional admixture for the production of

high quality concrete products from zero-slump concrete.

- > improved workability of the mix with optimum water content
- reduced calcium-carbonate efflorescence and iron-based efflorescence/discoloration
- > improved colour performance
- > significantly diminished sticking of concrete at the machine stamp
- dense and smooth surface finish
- improved freeze-thaw resistance and durability
- > improved workability of the mix with optimum
- water content reduced calcium-carbonate efflorescence and
- iron-based efflorescence/discoloration improved colour performance
- > significantly diminished sticking of concrete at the machine stamp
- dense and smooth surface finish
- improved freeze-thaw resistance and durability

- Production of concrete block products from Zeroslump concrete such as:
- > pavers
- > slabs
- gardening and landscaping products
- and many others
- Production of concrete block products from Zeroslump concrete such as:
- pavers
- slabs
 - gardening and landscaping products
 - and many others

FIELDS OF APPLICATION **PLASTOLITH CHARACTERISTICS**

PLASTOLITH OptiCem® Color

is a high performance admixture for optimisation of the cement content and minimizing efflorescence potential in zero-slump mixes for concrete products, such as pavers, kerbs, slab etc.

- binder and the adhesion between binder and aggregates
- The use of PLASTOLITH OptiCem® Color results in high early and final strength at low cement levels.
- pives a spontaneous and complete dispersion of PLASTOLITH OptiCem Color is successfully used for all binder particles and fines in the mix improves the strength of the hardened
- minimizing primary and secondary efflorescence | kerbstones acc. to EN 1340
- paving stones acc. to EN 1338 , slabs acc. to EN 1339

simultaneous optimisation of quality and cost of

retaining wall stones

concrete mixes for the production of:

- > and many others

PLASTOLITH OptiCem® HS

is a high performance admixture for optimisation of the cement content and minimizing efflorescence potential in zero-slump mixes for concrete products, such as pavers, kerbs, slab etc.

- > synthetic high-performance plasticizer with colour enhancing
- efflorescence reducing
- > water repellent components
- dense sides and surface
- > strength increase with possibility of cement reduction
- PLASTOLITH OptiCem® HS is successfully used for simultaneous optimisation of quality and cost of concrete mixes for the production of:
- > paving stones acc. to EN 1338, slabs acc. to EN 1339
- > kerbstones acc. to EN 1340
- > retaining wall stones
- and many others

PLASTOLITH	CHARACTERISTICS	FIELDS OF APPLICATION
PLASTOLOTH OptiDur is a ready-to-use additive for the optimization of freeze/ thaw resistance or weather resistance of directly demoulded concrete products from earth-moist concrete.	 achievement of very high freeze and thaw resistance minimization of capillary water absorption 	Concrete products with high freeze and freeze/thaw resistance and weathering resistance, such as: > concrete paving stones in accordance with EN 1338 > curbstones in accordance with EN 1340 > edge stones > gutter stones > and many others

PAVELITH®	CHARACTERISTICS	FIELDS OF APPLICATION
PAVELITH® VM 100 has been specially developed for concrete face mixes. It minimizes efflorescence on concrete block products and enhances color brilliance.	 reduced tendency towards lime efflorescence and ferrous efflorescence/discoloration enhanced color brilliance very good anti-adhesive effect very good surface and side finish reduced shrinkage cracks in face mix concrete 	Can be successfully used in the production of any directly demolded concrete block product from earthmoist concrete, such as: > paving stones > curbstones (face mix concrete) > embankment stones and plant rings > slabs > palisades > and many others
PAVELITH® VM 200 is especially designed for concrete block products made of earth-moist concrete with high demands on color fastness, color intensity, color retention and weather resistance.	 reduces the tendency towards lime efflorescence and ferrous efflorescence/ discoloration intensifies the color effect and improves color stability provides a good anti-adhesive effect provides increased weather resistance (freeze/ thaw resistance) provides very good surface and side sealing 	Can be successfully used for the production of all concrete block products made of earth-moist concrete, such as: > paving stones > slabs > embankment stones > palisaes > and many others
PAVELITH® VM 201 features a well-balanced combination of the positive properties of plasticizers and waterproofing agents and is distinguished by its remarkable anti-adhesive properties.	 enhanced color brilliance reduced tendency towards lime efflorescence and ferrous efflorescence/discoloration very good anti-adhesive effect allows for the creation of an optimal moisture content in concrete face mixes improved filling properties reduced shrinkage cracks in face mix concrete very good surface and side sealing 	Can be successfully used for the production of all concrete block products made of earth-moist concrete, such as: > paving stones > slabs > embankment stones > palisades > and many others
PAVELITH® AP 20 is a multi-functional economical admixture designed for the production of high-quality concrete block products from earth-moist concrete.	 > greatly reduced tendency for sticking > good side and surface sealing > minimized primary and secondary efflorescence > intensified color effect > reduced water absorption > economic use in concrete face mixes and core concrete 	Can be successfully used in the production of all concrete block products made of earth-moist concrete, such as: > paving stones > slabs > embankment stones > palisades > and many others

PAVELITH®	CHARACTERISTICS	FIELDS OF APPLICATION
PAVELITH® KB 200 has been especially developed for the production of colored concrete block products from earth-moist concrete and combines multiple mechanisms. The water-absorption and post-treatment mechanism causes a reaction in the concrete, reducing the capillary transport of lime hydrate to the concrete surface. The plasticizing agents provide a dense concrete structure with good side and surface sealing and significantly reduce the tendency for sticking.	 minimization of primary and secondary efflorescence intensifies the color effect and improves color stability features a strong plasticization effect higher density of concrete blocks good side and surface sealing reduced tendency for sticking 	Can be successfully used for the production of all concrete block products made of earth-moist concrete, such as > paving stones > slabs embankment stones > palisades > and many others
PAVELITH® KB 210 has been especially developed for the production of colored concrete block products from earth-moist concrete and combines multiple mechanisms. The water-absorption and post-treatment mechanism causes a reaction in the concrete, reducing the capillary transport of lime hydrate to the concrete surface. The plasticizing agents provide a dense concrete structure with good side and surface sealing and significantly reduce the tendency for sticking.	 minimization of primary and secondary efflorescence intensifies the color effect and improves color stability has a well-balanced plasticizing effect as a result improved filling properties enhanced leak-tightness increased strength good side and surface sealing reduced tendency for sticking 	Can be successfully used for the production of all concrete block products made of earth-moist concrete, such as: > paving stones > slabs > embankment stones > palisades > and many others
PAVELITH® KB 300 has been especially developed for the production of colored concrete block products from earth-moist concrete. It reacts with the concrete, closes the pores and thus reduces the penetration of extraneous water and the capillary transport of lime hydrate. The plasticizing components provide a dense concrete structure with good side and surface sealing and significantly reduce the tendency for sticking.	 minimized primary and secondary efflorescence intensified color effect good side and surface sealing reduced tendency for sticking increased strength reduced water absorption thanks to a denser concrete structure and waterproofing effect 	Can be successfully used for the production of all concrete block products made of earth-moist concrete, such as: > paving stones > slabs > embankment stones > palisades > and many others
PAVELITH® AP 15 minimizes efflorescence on concrete block products and enhances color brilliance. It allows for the creation of an optimal moisture content and at the same time, reduces the sticking of the concrete to the stamp.	Thanks to its balanced combination of plasticizing, pore-forming and sealing active components, PAVELITH® AP 15 provides the following advantages in concrete products of any type: > reduced tendency towards lime efflorescence and ferrous efflorescence/discoloration > enhanced color brilliance > provides a good anti-adhesive effect > provides a very good surface and side finish > reduced shrinkage cracks in face mix concrete	Can be successfully used in the production of any directly demolded concrete block product from earth-moist concrete, such as: > paving stones > curbstones (face mix concrete) > embankment stones and plant rings > slabs > palisades > and many others

WATER-REPELLENT AND EFFLORESCENCE CONTROL ADMIXTURE

PLASTOLITH | ALPHALITH® | COLORMENT® | PAVELITH®

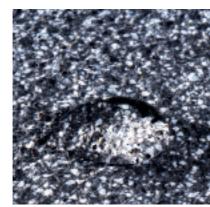
Our admixture formulations with waterproofing, plasticizing, efflorescence-reducing, and color-intensifying properties will impress.

Depending on the application and task set, we offer a selection of admixtures with specific properties.

Waterproofing and concrete block treatments improve the quality of your concrete block products.



Higher compressive-, split tensile and bending tensile strength



Bearding effect



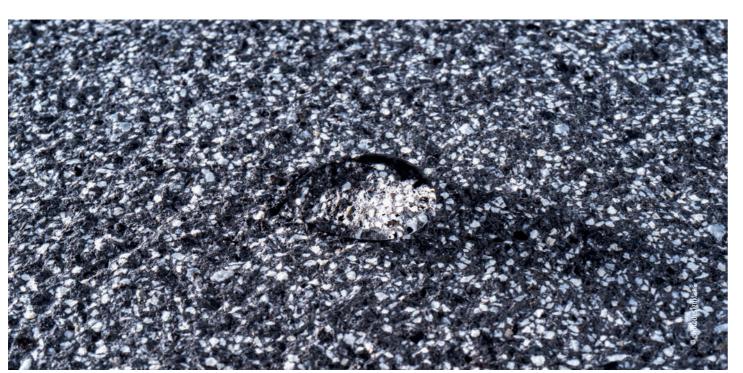
PLASTOLITH	CHARACTERISTICS	FIELDS OF APPLICATION
PLASTOLITH OptiPave 5 is an innovative multi-functional admixture for the production of topquality concrete block products from earth-moist concrete the vibro-compaction and pressing process.	 enhanced compression, tensile and bending strength intensifies the color effect and color stability minimization of primary and secondary efflorescence reduced capillary and atmospheric water absorption improved weather resistance 	PLASTOLITH OptiPave 5 is primarily used in top- quality paving and slab systems.
COLORMENT®	CHARACTERISTICS	FIELDS OF ADDITION

COLORMENT®	CHARACTERISTICS	FIELDS OF APPLICATION
COLORMENT® HS FC is a hydrophobic and plasticizing coating for concrete block products COLORMENT® HS F was developed for the pro- duction of high-quality slabs and pavers from earth-moist concrete using the vibro-pressing process. COLORMENT® HS FC is a combination of special hydrophobic sealants with very effective plasticizing additives.	 reduced atmospheric water absorption with beading effect on the surface increased color brilliance reduced efflorescence impreovement of mould filling and compaction increased strength 	COLORMENT® HS FC can be used in the production of all concrete block products made of earth-moist concrete, such as: > pavers > slabs > embankment Blocks > palisades > and many others

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® Block-Mix water-repellent admixture with plasticizing effect for concrete masonry blocks.	 > protection from driving rain and moisture penetration > high density > improvement of mould filling and compaction > reduced efflorescnce 	For high quality exposed concrete masonry units and other concrete block products with minimized atmospheric water absorption.
ALPHALITH Duraphob® HC ALPHALITH Duraphob® HC is a highly effective and concentrated water repellent agent for concrete. It's preferably added to face concrete of high quality, often surface treated and subsequently impregnated or sealed concrete products. The water repellent effect of alphalith Duraphob® HC leads to a long-lasting hydrophobicity. The water vapor permeability is maintained.	 very strong water-repellent effect reduction of caillary water absorption and atmospheric water absorption minimizes efflorescence 	For concrete block products being coated.

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH Duraphob® HC Plus is a highly-concentrated, ready-to-use water repellent admixture for concrete products. ALPHALITH Duraphob® HC Plus wird dabei Betonmischungen von hochwertigen, häufig mit werksteinmäßig bearbeiteten Oberflächen versehe- nen und anschließend imprägnierten, versiegelten oder beschichteten Betonsteinerzeugnisse zugesetzt.	 high density of the capillary structure capillary water absorption is reduced to a minimum reduction of lime efflorescence very strong water-repellent effect 	Hydrophobing agent for the production of concrete blocks. Due to its properties ALPHALITH Duraphob® HC Plus can also be used as an impregnating agent.
ALPHALITH Duraphob® (DM) is a ready-to-use water repellent admixture for concrete and mortar. ALPHALITH Duraphob® (DM) minimizes the capillary water absorption and protects from rain, rising moisture, surface water and other entrainment of moisture. ALPHALITH Duraphob® (DM) significantly reduces efflorescence of concrete products.	 > strong water-repellent effect > minimizes capillary/atmospheric water absorption > minimizes efflorescence 	Concrete products such as: > paving stones > slabs > kerbs > retaining-wall blocks > building blocks > and many others Concrete products with protection against: > rain > surface water > rising moisture > and many others
ALPHALITH Duraphob® SH is a highly effective water repellent admixture for the production of concrete block products.	 high density of the capillary structure minimizes capillary/atmospheric water absorption minimizes efflorescence 	Can be used in all high-quality concrete block products, mainly for facing concrete of pavers and slabs. In concrete block products that are finished with impregnations, sealers or coating systems, the use of ALPHALITH Duraphob® SH is a decisive component of the concrete optimization to be applied.
ALPHALITH Duraphob® LS is a ready-to-use water repellent admixture for concrete and mortar.	 increases the surface tension in the capillaries and blocks the capillaries with water repellent substances water suction in the capillaries is reduced to a minimum and the entrainment of water into the concrete or mortar is significantly blocked the migration of calciumhydroxide to the concrete surface and thus the occurrence of efflorescence are minimized improves the weather resistance of concrete products 	Concrete products such as: > paving stones > slabs > kerbs > retaining-wall blocks > building blocks > and many others Concrete products with protection against: > rain > surface water > rising moisture > and many others

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH Duraphob® M is a waterproofing sealant for the effective reduction of the water absorption of concrete block products ALPHALITH Duraphob® M minimizes capillary water absorption and protects against rising moisture levels and other ingress of moisture into the concrete.	 > strong water-repellent effect > minimizes capillary/atmospheric water absorption > minimizes efflorescence 	Can be used successfully in all concrete block products, such as > paving stones > slabs (pressed or cst) > bricks > drystone Systems > roof tiles > and many others
ALPHALITH Duraphob® CF is a waterproofing treatment for dyed concrete products. It provides enhanced leak-tightness of the concrete structure and creates an inner seal of the capillary system with water-repellent substances. Capillary moisture exchange is reduced to a minimum. Lime efflorescence is largely prevented.	 minimization of primary and secondary efflorescence intensifies the color effect and color stability reduced atmospheric water absorption 	Can be successfully used in concrete block products made of earth-moist concrete, such as paving stones slabs or gardening products, as well as in mixtures of plastic consistency (Hermetic face mixes).
ALPHALITH® Duraphob E is a ready-to-use water repellent admixture for the manufacture of concrete products. It minimizes the capillary water absorption and protects from rain, rising moisture, surface water and other entrainment of moisture. ALPHALITH Duraphob® E significantly reduces efflorescence of concrete products.	 > strong water repellent effect > reduction of capillary water absorption > minimizes efflorescence 	Concrete products such as: > paving stones > slabs > kerbs > retaining-wall blocks > building blocks > and many others Concrete products with protection against: > rain > surface water > rising moisture > and many others



PAVELITH®	CHARACTERISTICS	FIELDS OF APPLICATION
PAVELITH® AP 400 is an efflorescence-reducing and waterproofing sealant with a pearling effect, designed to permanently reduce the capillary water absorption of concrete block products. The active ingredients of PAVELITH® AP 400 are chemically bound into the cement matrix. Water vapor permeability is maintained.	PAVELITH® AP 400 provides the following advantages for concrete products and concrete block products: > remarkable protection against water absorption > strong water pearling effect > improved frost and freeze-thaw resistance > reduced tendency for efflorescence and greening > enhanced color brilliance and color retention > higher durability	Can be successfully used for the production of all concrete components and concrete block products made of earth-moist concrete such as: > paving stones > slabs (pressed or cast) > embankment stones > dry masonry wall systems > palisades > roof tiles > and many others
PAVELITH® AP 250 was especially developed for the manufacture of top-quality paving stones, bricks and other concrete block products with minimized atmospheric water absorption.	water-repellent effect with long-lasting resistance to moisture penetration higher strength reduced efflorescence uniform and smoothe surface structure without disturbing cement stains	For top-quality paving stones, bricks and other concrete block products with minimized atmospheric water absorption.
PAVELITH® AP 500 was especially developed for the manufacture of top-quality paving stones, bricks and other concrete block products with minimized atmospheric water absorption.	 remarkable water-repellent effect increasedstrength reduced efflorescence tendency uniform surface structure 	For top-quality paving stones, bricks and other concrete block products with minimized atmospheric water absorption.
PAVELITH® AP 600 has been especially developed for the production of colored concrete block products made of earth-moist concrete and combines multiple mechanisms. The water-absorption mechanism reduces the capillary transport of lime hydrate to the concrete surface. The plasticizing agents provide a dense concrete structure with very good side and surface sealing and minimized tendency for sticking.	 intensified color effect improved color stability enhanced color brilliance minimized primary and secondary efflorescence reduced atmospheric water absorption very good side and surface sealing greatly reduced tendency for sticking 	Can be successfully used in concrete block products made of earth-moist concrete, such as: > paving stones > slabs > gardening products > wet-cast products
PAVELITH® AP 610 has been especially developed for the production of colored concrete block products made of earth-moist concrete and combines multiple mechanisms. The water-absorption mechanism reduces the capillary transport of lime hydrate to the concrete surface. The plasticizing agents provide a dense concrete structure with very good side and surface sealing and espacially minimized tendency for sticking.	 intensified color effect improved color stability enhanced color brilliance minimized primary and secondary efflorescence reduced atmospheric water absorption very good side and surface sealing greatly reduced tendency for sticking 	Can be successfully used in concrete block products made of earth-moist concrete, such as: > paving stones > slabs > gardening products > wet-cast products



construction concrete. ALPHALITH® concrete superplasticizers and plasticizers allow for the production of cost-optimized top-quality concrete in all consistency, strength and exposure classes.

ALPHALITH® high-performance superplasticizers are used in the production of precast parts made of reinforced and prestressed concrete with the highest early and final strengths, as well as top-quality exposed concrete. Superplasticizers are used in conventional manufacturing processes as well as in highly-flowable and self-compacting concrete (SCC).

ALPHALITH® admixtures have proven to be effective in the production of ready-mixed and construction site concrete with the highest requirements, such as high-strength concrete up to C100/115.

The use of our superplasticizers from the ALPHALITH® series leads to a significant increase in consistency and/or a reduction in w/c value. See for yourself: the diverse application possibilities of our superplasticizers will impress you.

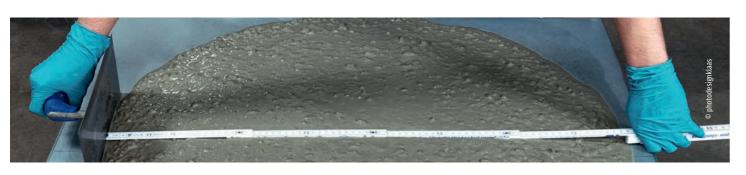
The use of our superplasticizers from the ALPHALITH® series leads to a significant increase in consistency and/or a reduction in w/c value. See for yourself: the diverse application possibilities of our superplasticizers will impress you.

ALPHALITH FIELDS OF APPLICATION **CHARACTERISTICS** > strong increase of workability or reduction of ALPHALITH® FTB (FM) is used for the economical ALPHALITH® FTB (FM) production of: is an effective superplasticizer for the economical pro-> homogeneous concrete duction of high quality concrete in ready-mix and precast high early strength increase > concrete and reinforced concrete | EN 206, DIN 1045 applications. > concrete with high resistance against chemical attack > concrete with high frost-thaw-resistance ALHALITH® Superplasticizer FTB FM causes a powerful > concrete with very high early- and final strength dispersion of the cement particles and reduces the internal precast concrete elements of all types made of frictional forces of the concrete mixture. This leads to a high unreinforced or loosely reinforced concrete degree of flowability, workability and homogeniety. It does prestressed concrete not entrain any additional air. > strong increase of workability or reduction of ALPHALITH® FT 30 (FM) is used for the economical ALPHALITH® FT 30 (FM) is an effective superplasticizer for the economical prohomogeneous concrete duction of high quality concrete in ready-mix and precast high early strength increase concrete and reinforced concrete | EN 206, DIN 1045 concrete with high resistance against chemical attack > concrete with high frost-thaw-resistance ALHALITH® Superplasticizer FTB FM causes a powerful di-> concrete with very high early- and final strength spersion of the cement particles and reduces the internal precast concrete elements of all types made of frictional forces of the concrete mixture. This leads to a unreinforced or loosely reinforced concrete high degree of flowability, workability and homogeniety.It prestressed concrete does not entrain any additional air. > very high plasticizing and watersaving properties | Concretes with special properties, e.g.: ALPHALITH® FT 30 (LV) > water reduction of up to 35 per cent is a highly concentrated, very effective superplasticizer > water-unpermeable concrete, > high early and final strength with purely synthetic active ingredients for the economical > high resistance against chemical attack > good homogeniety of the mix production of high quality concrete and high performance > high frost-thaw-resistance > none additional air entrained concrete in the precast or ready-mix plant and on site. > underwater concrete) > slight retardation of set, no retardation of hardening ALPHALITH® Hyerpflow 1031 (FM) is used for the ALPHALITH® Hyperflow 1031 (FM) > excellent plasticizing properties high increase of early strength economical production of: is a superplasticizer with a very strong plasticizing effect and a particularly short mixing time, combined with very > exposed precast concrete with low or no compaction high early strength and consistency retention even at higher temperatures. > self-compacting concrete (SCC) > early high-strength concretes in consistencies F1-F6 early high-strength prestressed concrete concretes with very low w/c ratios and high workability consistency high-strength concrete (= C55/67)

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® Hyperflow 2000 (FM) is a superplasticizer of the new generation of PCE polymers with a performance exceeding the well-known melamine-and naphtalene-based superplasticizers by far.	very strong increase of workability and/or reduction of w/c-ratio with low dosages required excellent flowability also with high powder contents and use of silicafume	ALPHALITH® Hyperflow 2000® (FM) is used for the economical production of: > self-Compacting Concrete (SCC) > high-Strength Concrete (HSC) > high-Slump Concrete with extremely low watercement-ratio > concrete with very high early- and final strength > production of precast elements with high-quality surface Finish
ALPHALITH® Hyerflow 2015 TB (FM) is a superplasticizer with good slump retention and high robustness. ALPHALITH® Hyperflow 2015 TB allows the production of top-quality concrete with extended processing time.	 effective cement-dispersing action strong plasticizing effect good slump retention 	 universal PCE superplasticizer for concrete with long-lasting slump ready-mix concrete prefabricated parts
ALPLHALITH® Hyperflow 2020 (FM) is a superplasticizer of the new generation of PCE polymers with a very strong plasticizing action, high early strength development and moderate slump-loss for precast and ready-mix applications.	strong increase of workability and/or reduction of w/c-rato with low dosages required excellent flowability also with high powder contents and use of silicafume.	ALPHALITH® Hyperflow 2020 (FM) is used for the economical production of: > concrete with very high early- and final strength > production of precast elements with highquality surface finish > high-Slump Concrete with very low watercementratio > self-Compacting Concrete (SCC) > high-Strength Concrete (HSC)
ALPHALITH® Hyperflow 2025 LS (FM) is a superplasticizer of the new generation of PCE polymers with a very strong plasticizing action along with high early strength development and an extended slump retention with approval for the drinking water sector.	 very strong increase of workability and/or reduction of w/c-ratio good slump etention high early strength devlopment 	ALPHALITH® Hyperflow 2025 LS (FM) wis used for the economical production of: high early strength concrete in slump classes F1-F6 high early strength prestressed concrete concrete with very low w/c values and high slump concrete with extended slump retention production of exposed concrete precast elements with low or no compression effort self-compacting concrete (SCC) high-strength concrete (2 C55/67) prestressed concrete concrete for drinking water applications

ALPHALITH®	EIGENSCHAFTEN	EINSATZGEBIETE
ALPHALITH® Hyperflow 2030 (FM) is a superplasticizer of the new generation of PCE polymers with a very strong plasticizing action, very high early strength development and moderate slump-loss for precast and ready-mix applications.	 very strong increase of workability and/or reduction of w/c ratio very strong plasticizing effect even with high amounts of fines high increase of early strength 	ALPHALITH® Hyperflow 2030 (FM) is used for the economical production of: > concrete with very high early- and final strength > production of precast elements with highquality surface finish > high-slump concrete with very low watercement- > ratio > self-compacting concrete (SCC) > high-strength concrete (HSC)
ALPHALITH® Hyperflow 2030 LS (FM) is a superplasticizer of the new generation of PCE polymers with a very strong plasticizing action, high early strength development and an extended slump retention for precast and ready-mix applications.	 very strong increase workability and/or reduction of w/c-ratio very strong plasticizing effect even with high amounts of fines high increase of early strength 	ALPHALITH® Hyperflow 2030 LS (FM) is used for the economical production of: > concrete with very high early- and final strength > production of precast elements with highquality surface finish > high-slump concrete with very low watercement-ratio > self-compacting concrete (SCC) > high-strength concrete (HSC)
ALPHALITH® Hyperflow 2060 (FM) is a superplasticizer of the new generation of PCE polymers with a very strong plasticizing action, high early strength development and an extended slump retention for readymix and precast-applications.	 very strong plasticizing effect very strong increase of workability PCE based 	ALPHALITH® Hyperflow 2060 (FM) is used for the economical production of: > ready-mix concrete (F3-F6) > precast concrete with extended workability > high-slump concrete with low water-cementratio > concrete with high early- and final strength > self-compacting concrete (SCC) > high-strength concrete (HSC)

ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® Hyperflow 3035 (FM) s a superplasticizer of the new generation of PCE polymers with a combination of high plasticizing effect, high-earlystrength development and low stickiness of concrete.	very strong increase of workability and/or reduction of w/c-ratio high early-strength development good slump retention easy to trowel-smooth concrete surface	ALPHALITH® Hyperflow 3035 (FM) is used for the economical production of: > high-Slump concrete with very low watercement-ratio self-compacting concrete (SCC) > high-workabilty concrete (F5/F6) > high-strength concrete (HSC) > concrete with very high early- and final strength > production of precast elements with highquality surface Finish
ALPHALITH® Hyperflow 4020 VE (FM) is a superplasticizer specially developed for high exposed concrete quality with good initial plasticizing, consistency maintenance and improved early strengths.	 › deaerating and liquefying effec › improved exposed concrete qualit › reduced efflorescenc › increased resistance to damaging environmental influences › reduced tendency to soiling 	ALPHALITH® Hyperflow 4020 VE (FM) is used for the economical production of: > self-compacting concrete (SCC) > concretes of consistency class F2-F6 > exposed precast concrete with low compaction requirements > ready-mixed concrete and prestressed concrete > Concretes with very low w/c ratios and high slump Consistency
ALPHALITH® Hyperflow 4035 (FM) is a superplasticizer of the new generation of PCE polymers with highest efficiency and highest early-strength development.	 very strong increase of workability and/or reduction of w/c ratio very high early-strength development moderate slump retention 	ALPHALITH® Hyperflow 4035 (FM) is used for the economical production of: high-slump concrete with very low watercement-ratio self-compacting concrete (SCC) high-workabilty concrete (F5/F6) high-strength concrete (HSC) concrete with very high early- and final strength production of precast elements with highquality surface finish pre-stressed concrete



ALPHALITH®	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® Hyperflow 5030 (FM) is a superplasticizer with quick strong plasticizing action and solid slump retention. ALPHALITH® Hyperflow 5030 enables the production of durable concrete with high early strength development in slump classes F1-F6 and SVB.	 › good/simplified smoothing behavior › reduced viscosity of the concrete › reduced tendency for skinning › stability even with fluctuating water dosing 	ALPHALITH® Hyperflow 5030 (FM) is used for the economical production of: > production of precast components of any kind > easy-to-process, less viscous concrete > production of top-quality exposed concrete > high early strength concrete in slump classes F1-F6 and high early strength prestressed concrete > ready-mixed concrete > self-compacting concrete (SCC) > high-strength concrete (C55/67)
ALPHALITH® Hyperflow 5135 (FM) is a superplasticizer for universal applications with very quick strong plasticizing action and solid slump retention. It enables the production of durable concrete with high early strength development in slump classes F1-F6 and SVB.	 > good/simplified smoothing behavior > reduced viscosity of the concrete > reduced tendency for skinning > stability even with fluctuating water dosing 	ALPHALITH® Hyperflow 5135 (FM) is used for the economical production of: > production of precast components of any kind > easy-to-process, less viscous concrete > production of top-quality exposed concrete > high early strength concrete in slump classes F1-F6 and high early strength prestressed concrete > ready-mixed concrete > self-compacting concrete (SCC) > high-strength concrete (C55/67)
ALPHALITH® Hyperflow 6020 VE (FM) is a superplasticizer specially developed for high exposed concrete quality with good initial plasticizing action, slump retention and high early strength development at the same time.	 enhanced quality of exposed concrete increased resistance against damaging environmental influences reduced efflorescence tendency lower soiling tendency 	ALPHALITH® Hyperflow 6020 VE (FM) is used for the economical production of: > self-compacting concrete (SCC) > F2-F6 slump class concrete > precast concrete > ready-mixed concrete > concrete with very low w/c values and high slump
ALPHALITH NeoFlow® CK-135 is a superplasticizer with quick strong plasticizing action and solid slump retention. ALPHALITH® NeoFlow® CK-135 enables the production of durable concrete with high early strength development in slump classes F1-F6 and SVB.	 > good/simplified smoothing behavior > reduced viscosity of the concrete > reduced tendency for skinning > stability even with fluctuating water dosing 	ALPHALITH NeoFlow® CK-135 is used for the economical production of: > production of precast components of any kind > easy-to-process, less viscous concrete > production of top-quality exposed concrete > high early strength concrete in slump classes F1-F6 and high early strength prestressed concrete > ready-mixed concrete > self-compacting concrete (SVB/SCC) > high-strength concrete (C55/67)

ALPHALITH® CONCRETE PLASTICIZERS

CHARACTERISTICS

FIELDS OF APPLICATION

ALPHALITH® Concrete Plasticizer 2 BV

is a highly effective, liquid concrete plasticizer and waterreducing agent, based on a high grade lignosulphonic acid derivative. When ALPHALITH® Concrete Plasticizer 2 BV is added to the mix, it is adsorbed onto the cement particles and gives a powerful deflocculating action.

The cement hydration reaction proceeds more efficiently with less water, resulting in a significant increase in strength or the possibility to reduce cement content of concrete.

ALPHALITH® Concrete Plasticizer 3 BV

is a highly effective, liquid concrete plasticizer and waterreducing agent, based on a high grade lignosulphonic acid derivative. When alphalith Concrete Plasticizer 3 BV is added to the mix, it is adsorbed onto the cement particles and gives a powerful deflocculating action.

The cement hydration reaction proceeds more efficiently with less water, resulting in a significant increase in strength or the possibility to reduce cement content of concrete.

- high increase of consistency and/or w/creduction
- » gives homogeneous concrete with good workability

ALPHALITH® 2 (BV) is used for the economical production of:

- > quality concrete of all grades
- > impermeable concrete
- > concrete with large reinforcement
- > blocks, slabs, curbstone, pipes etc.
- > high increase of consistency and/or w/creduction

gives homogeneous concrete with good workability

ALPHALITH® 3 (BV) is used for the economical production of:

- > quality concrete of all grades
- > impermeable concrete
- > concrete with large reinforcement
- > blocks, slabs, curbstone, pipes etc.





Air-entraining Agent | Concrete Retarder | Accelerator of Hardening | Concrete Stabilizers/Viscosity Modifiers | Shrinkage Reducing Admixtures | Air-detraining Agent | Smoothers | Post-Treatment/Curing Agents

All products from our range are subject to ongoing production inspections and are audited by external institutes.

We can supply you with all the admixtures you need for the economical and quality-optimized production of concrete.

Our experienced concrete engineers (VDB) and consultants in the field will help you with:

- > Choosing the right products for the intended purpose
- > Conducting suitability tests in the laboratory or in the plant
- > Development of company-specific solutions.

Professional service that is quickly available to every customer has always been an integral part of the performance of Rhein-Chemotechnik GmbH. With our comprehensive service, we offer our customers top safety, quality, and cost-effectiveness.

We guarantee you a punctual and reliable material planning for your products. We make a significant contribution to environmental protection by delivering products in road tankers and recyclable loan containers.

ALPHALITH® AIR-ENTRAINING AGENTS

CHARACTERISTICS

ALPHALITH® Micorpor 95 (LP)

is a liquid, resin-based air entraining agent. Its concentration allows an exact dosage in order to achieve constant contents of air bubbles.

ALPHALITH® Micropor 95 LP generates small an stable air bubbles in the concrete, which act as ball bearings in the fresh concrete, thus improving workability. The air bubbles also act as a substitue for lacking fines in the aggregate.

In the hardened concrete the micropares formed by the air bubbles interrupt the capillary water suction and hence reduce the capillary water suction of the concrete. Freezing water ist allowed to expand into the micropores. This leads to a substantial improvement of frost-thaw-resistance.

- > creates a system of stable micropores of defined size and distribution in concrete
- > increases flexibility
- > improves workability

ALPHALITH® Micropor S (LP)

is a liquid, resin-based air entraining agent. Its concentration allows an exact dosage in order to achieve constant contents of air bubbles.

ALPHALITH® Micropor S LP generates small an stable air bubbles in the concrete, which act as ball bearings in the fresh concrete, thus improving workability. The air bubbles also act as a substitue for lacking fines in the aggregate.

In the hardened concrete the micropares formed by the air bubbles interrupt the capillary water suction and hence reduce the capillary water suction of the concrete. Freezing water ist allowed to expand into the micropores. This leads to a substantial improvement of frost-thaw-resistance.

- > creates a system of stable micropores of defined size and distribution in concrete
- > increases flexibility
- > improves workability

ALPHALITH® Micropor T (LP)

is used in concretes that come into contact with frost and de-icing Salt The areas of application are therefore in road and bridge construction, in the manufacture of concrete products (e.g. stair embankments) and wherever the workability of low-powder contents mixtures is to be improved.

In the hardened concrete the micropares formed by the air bubbles interrupt the capillary water suction and hence reduce the capillary water suction of the concrete. Freezing water ist allowed to expand into the micropores. This leads to a substantial improvement of frost-thaw-resistance.

- > increase of freeze-thaw resistance
- > creates a System of stable micopores of defined size and Distribution in concrete
- > for precast elements (barrier walls, steps, etc.)
- > improves workability and reduced bleeding
- > recommended for combination with PCE-based superplasticizers



ALPHALITH® CONCRETE RETARDER

CHARACTERISTICS

ALPHALITH® 1 (VZ)

is a liquid, concentrated retarder based on selected inorganic active ingredients. ALPHALITH® Concrete Retarder 1 VZ provides a good reproducability of retardation under given conditions.

- > retardation of set and hardening
- > retardation of up to about 24 hours
- y good reproducability of retardation times with a given mix
- increased final strength
- > reduced temperature peaks of heat of hydration
- > reduced tendency towards cracking

ALPHALITH® ACCELERATOR OF HARDENING

CHARACTERISTICS

ALPHALITH® 3 (BE)

is a chloride-free accelerator ofhardening for the production of non-reinforced concrete products.

ALPHALITH® Accelerator 3 BE gives an early increase of the rate of reaction of the cement constituents. The formation of the strength-giving hydration phases, esp. C3S and C3A is being accelerated.

This results in a substantial increase of early strength.

Depending on type and composition of cement increases in final strength have been observed.

> accelerates the rate of hydration of cement

> significantly increases early strength while maintaining final strength

ALPHALITH® Accel 100 (BE)

is a new -generation accelerator of hardening based on CSH-nanocrystal seeds, designed to accelerate the rate of hardening of concrete at a very early stage of hydration.

- > considerably increased turnover of formw ork in Concrete precast production
- > considerably reduced or eliminated heat curing or steamcuring
- > reduced CO2-emission
- > allow s reduction of cement content, use of low er grade cement or higher amount of cement substitutes, e.g. flyash or limestone powder
- > concreting at low ambient temperatures
- > early attaining of 5 N/mm² minimum strength for frost resistance of concrete
- > improved durability, e.g. by reduced w ater absorption and improved density of concrete

ALPHALITH® Accel 200 (BE)

is a nitrate-free new-generation accelerator of hardening based on CSH-nanocrystal seeds, designed to accelerate the rate of hardening of concrete at a very early stage of hydration.

- > considerably increased turnover of formwork in Concrete precast production
- > considerably reduced or eliminated heat curing or steamcuring
- > reduced CO2-emission
- > allows reduction of cement content, use of lower grade cement or higher amount of cement substitutes, e.g. flyash or limestone powder
- > concreting at low ambient temperatures
- > early attaining of 5 N/mm² minimum strength for frost resistance of concrete
- > improved durability, e.g. by reduced water absorption and improved density of concrete

ALPHALITH® ACCELERATOR OF HARDENING

CHARACTERISTICS

ALPHALITH® Accel F-300 (BE)

is a liquid setting accelerator and antifreeze for concrete. Significant increases in early strength development are achieved especially at low hardening temperatures.

Fiel of Application:

- > precast concrete parts
- > sliding formwork concrete
- > concreting work in cold weather

The product is not approved for use in prestressed concrete.

ALPHALITH® Accel F-300 (BE) accelerates the initial setting of the concrete and at the same time lowers the freezing point of the water in the concrete. This provides but is not limited to the following advanta-

- faster reloading of formwork
- energy savings thanks to reduced heat treatment

ALPHALITH® CONCRETE STABILIZER VISCOSITY MODIFIER	CHARACTERISTICS	FIELDS OF APPLICATION
ALPHALITH® F 2 (ST) is an effective stabilizing admixture for mortar and concrete, especially effective in the production of Self Compacting Concrete (SCC) in conjunction with high-performance superplasticizers, like PCEs e.g. The use of ALPHALITH® F 2 ST results in a homogenous concrete mix with minimized segre- gation and bleeding. With suitable SCC mixes in conjunction with high-end superplasticizer ALPHALITH® Hyperflow type, ALPHALITH® F 2 ST gives a readily-flowing concrete with a good cohesiveness.	 minimized segregation reduced bleeding improved homogeniety improved cohesion less variation in concrete consistency due to waterbinding capacity improved, more uniform surface finish 	> self-compacting-concrete (SCC) > precat elements with improved surface finish > pumped concrete > anti-washout admix for underwater concrete > concrete with lack of fines/powder
ALPHALITH Viscoton® K is a high quality viscosity modifier for cement-based products. ALPHALITH Viscoton® K results in very stable and homogeneous mixtures with high flowability, especially with high-performance concrete such as self-compacting concre- te (SVB) in conjunction with high-performance superplastici- zers (e.g. alphalith Hyperflow series).	 bleeding and demixing is effectively prevented improved homogeneity higher sedimentation stability (robustness) of SCC improved fair-faced concrete quality more even grain distribution on shot-blasted 	concrete that tends to bleed and segregate self-compacting concrete (SCC) exposed concrete blasted special parts

ALPHALITH®
SHRINKAGE REDUCING ADMIXTURES

CHARACTERISTICS

FIELDS OF APPLICATION

ALPHALITH® SRA 100

is a highly effective additive for reducing the drying shrinkage of concrete and mortar. Compared to conventional shrinkage modifiers, the polymers used in SRA 100 have only a minor effect on the strength formation of cementitious systems.

- > effective reduction of surface tension
- > massive reduction of shrinkage
- > minimizes cracking tendency

In all cementitious building materials.

ALPHALITH® AIR-DETRAINING AGENTS

CHARACTERISTICS

FIELDS OF APPLICATION

ALPHALITH® Porex HC

is a special admixture for fast and almost complete detraining of air from concrete. The amount of pores in the concrete is reduced to a minimium.

ALPHALITH® Porex HC may not be used in concrete with specified air content, e.g. together with an air-entraining admixture.

ALPHALITH® Porex HC prevents the entrainment of air into the concrete during the process of mixing and placing of concrete, remaining air bubbles are almost completely eliminated. When the concrete is properly designed, placed and compacted the use of ALPHALITH® Porex HC results in a concrete structure with minimized pore content.

This will usually result in:

- > improved surface texture
- > reduced tendency to efflorescence
- > reduced tendency to dirt adhesion

ALPHALITH® Porex HC is suitable for the production of:

- > plates
- > steps
- > components for street furniture
- > other non-constructional concrete elements

ALPHALITH® Porex FE (BV)

is a special admixture for fast and almost complete detraining of air from concrete. The amount of pores in the concrete is reduced to a minimium.

ALPHALITH® Porex FE (BV) may not be used in concrete with specified air content, e.g. together with an air-entraining admixture.

APHALITH® Porex FE (BV) prevents the entrainment of air into the concrete during the process of mixing and placing of concrete, remaining air bubbles are almost completely eliminated. When the concrete is properly designed, placed and compacted the use of ALPHALITH® Porex FE (BV) results in a concrete structure with minimized pore content.

This will usually result in:

- > improved surface texture
- > reduced tendency to efflorescence
- > reduced tendency to dirt adhesion

ALPHALITH® Porex FE (BV) is suitable for the production of: > plates

- > steps
- > troughs
- > components for street furniture
- > masonry units | precast units
- > concrete with highest exposed concrete quality
- > highly pigmented concrete mixtures
- concretes with tendency to increased pore and foam formation on the filling side

ALPHALITH® Porex DF 50 (BV)

is a special admixture for fast and almost complete detraining of air from concrete. The amount of pores in the concrete is reduced to a minimium.

ALPHALITH® Porex DF 50 (BV) may not be used in concrete with specified air content, e.g. together with an air-entraining admixture.

ALPHALITH® Porex DF 50 (BV) prevents the entrainment of air into the concrete during the process of mixing and placing of concrete, remaining air bubbles are almost completely eliminated. When the concrete is properly designed, placed and compacted the use of ALPHALITH® Porex DF 50 BV results in a concrete structure with minimized pore content.

This will usually result in:

- > improved surface texture
- > reduced tendency to efflorescence
- > reduced tendency to dirt adhesion

ALPHALITH® Porex DF 50 (BV) is suitable for the production of:

- > slabs
- > flags
- > stairs
- concrete elements for garden and landscape architecture
- other non-constructional concrete elements

ALPHALITH® Glätthilfe AG is a liquid, ready-to-use additive that is applied to the freshly produced concrete and makes it easier to smooth the concrete surface. At the same time, the drying out of the concrete surface is delayed. CHARACTERISTICS FIELDS OF APPLICATION The product is applied on fresh concrete surfaces that need to be smoothed. The product is applied on fresh concrete surfaces that need to be smoothed.

reduces efflorescence

alkali-resistant

solvent-free

protects the concrete from evaporation

enables an improved hydration process

minimizes the formation of shrinkage cracks

increased concrete resistance to chemical attack

ALPHALITH® POST-TREATMENT | CURING AGENTS

ALPHALITH® Glätthilfe AG Plus

improves the smoothing characteristics of fresh to matt-

CHARACTERISTICS

FIELDS OF APPLICATION

ALPHALITH® CC

moist concrete.

is a ready-to-use, liquid post-treatment agent on a dispersion base to protect against the drying out of freshly manufactured or freshly demolded concrete. The protective film of the ALPHALITH® CC minimizes water evaporation during the critical setting time of the concrete.

- blocks the capillary pores on the concrete surface
- creates a capillary barrier
- > protects against water loss and drying out
- > improves durability
- > prevents shrinkage and crack formation

ALPHALITH® CC wshould be used preferably as a post-treatment agent for:

> Smoother for concrete e.g. In precast production and

on the construction site for concrete of all types.

Production of smooth concrete elements

Smoother for screeds

- > precast concrete of all kinds
- > cement-bound screeds
- > concrete surfaces with and without additional

ALPHALITH® Nachbehandlungsmittel NB1

is a ready-to-use liquid post-treatment agent applied to freshly produced or freshly demolded concrete and protects it as much as possible from drying out.

- > blocks the capillary pores on the concrete surface
- › creates a capillary barrier
- > protects against water loss and drying out
- > improves durability
- prevents shrinkage and crack formation

ALPHALITH® Nachbehandlungsmittel NB1 is used as a post-treatment agent in concrete construction wherever the quick drying of fresh concrete should be prevented, for example in the following application.

- > traffic areas built using concrete: streets, squares
- > cement-bound screeds
- > freshly demolded concrete parts
- > concrete surfaces without any additional Coating

ALPHALITH® Nachbehandlungsmittel NB2

is used as a ready-to-use, dispersion-based liquid curing agent to protect freshly produced or freshly demolded concrete from drying out. The protective film of ALPHALITH® Nachbehandlungsmittel NB2 minimizes the evaporation of water during the critical hardening time of the concrete.

- > blocks the capillary pores on the concrete surface
- > creates a capillary barrier
- > protects against water loss and drying out
- > improves durability
- > prevents shrinkage and crack formation

ALPHALITH® Nachbehandlungsmittel NB2 is used as:

- > precast concrete parts of all kinds
- > cement-bound screeds
- > concrete surfaces with and without further coating

SURFACE PROTECTION PRODUCTS FOR CONCRETE PRODUCTS

IMPREGNATION | SEALING | COATING

For long-lasting durability of concrete block products

Rhein-Chemotechnik GmbH develops surface protection products for the impregnation, sealing and coating of concrete block products. You can have confidence in our decades of experience as a renowned supplier to the concrete block industry.

Our water based products ALPHALITH® StoneTec, ALPHALITH® Stone-Gloss, ALPHALITH® StoneSeal, and ALPHALITH® StoneCare brands, as well as the UV coatings of the LithoTop® series give your concrete block products:

- > easy to clean surfaces
- > more intense colors
- > increased protection against damaging weather conditions
- > reduced tendency towards greening and contamination
- > sustainable visual improvement in appearance and usability

Our surface protection products are tested in accordance with strict quality specifications in our in-house laboratories and by independent institutes.

Our service-oriented range of services is rounded off by the creation of comprehensive quality guides for the best possible design of the entire process, ranging from the production of blanks to the storage of the final product.

ALPHALITH® IMPREGNATION IMPREGNATION SEALER	CHARACTERISTICS	APPLICATION
ALPHALITH® StoneTec IS-L is applied for oil-, water-, dirt and stainproof impregnation of high-quality concrete products, esp. high-quality pavers and flags. Oil, water and stain forming liquids, like coffee, soft drinks etc. repel on the surface and can be easily remo- ved, e.g. by using an absorptive tissue. The general tendency towards staining of the surface is considerably reduced.	dirt- and stain-repelling effect towards oiland water-based liquids reduction of efflorescence practically no visible changes of the treated concrete surface possibly slight colour intensification with colored concrete products due to reducedprimary efflorescence generally reduced tendency towards efflorescence, dirt and staining easier cleaning of concrete	ALPHALITH® StoneTec IS-L is to be applied onto the hardened concrete products either in the production line before packaging or after placing onto the cleaned and dry concrete products.
ALPHALITH® StoneTec IS super is applied for oil-, water-, dirtand stainproof impregnation of high-quality concrete products, esp. high-quality pavers and flags. Oil, water and stain forming liquids, like coffee, soft drinks etc. repel on the surface and can be easily removed, e.g. by using an absorptive tissue. The general tendency towards staining of the surface is considerably reduced.	 dirt- and stain-repelling effect towards oil- and water-based liquids reduction of efflorescence practically no visible changes of the treated concrete surface possibly slight color intensification with colored concrete products due to reduced primary efflorescence generally reduced tendency towards efflorescence, dirt and staining easier cleaning of concrete 	ALPHALITH® StoneTec IS super is to be applied onto the hardened concrete products either in the production line before packaging or after placing onto the cleaned and dry concrete products.
ALPHALITH® StoneTec IS super plus is used for the impregnation of top-quality concrete block products, in particular top-quality slab and paving stone systems, creating a layer resistant to oil, water, dirt and stains. Oil, water or other liquids which cause stains, such as coffee, cola, etc., bead on the surface and be easily removed. The general tendency towards soiling is significantly reduced.	 dirt-repellent and stain-resistant effect against oily and watery dirt practically no visible changes of the concrete surface – an intensified color effect is possible in dyed products caused by the suppression of primary efflorescence reduced tendency towards efflorescence, soiling and greening easy removal of accumulating dirt and stains 	ALPHALITH® StoneTec IS super plus is to be applied onto the hardened concrete products either in the production line before packaging or after placing onto the cleaned and dry concrete products.
ALPHALITH® StoneTec M1 und M2 are applied for oil-, water-, dirt- and stainproof impregnation of high-quality concrete products, esp. high-quality pavers and flags. Oil, water and stain forming liquids, like coffee, soft drinks etc. repel on the surface and can be easily removed, e.g. by using an absorptive tissue and afterwards cleaning with water and a mild detergent. The general tendency towards staining of the surface is considerably reduced.	 dirt- and stain-repelling effect towards oil- and water-based liquids reduction of efflorescence practically no visible changes of the treated concrete surface; possibly slight colour intensification with colored concrete products due to reduced primary efflorescence generally reduced tendency towards efflorescence, dirt and staining easier cleaning of concrete 	ALPHALITH® StoneTec M1 und M2 are to be applied onto the hardened concrete products either in the production line before packaging or after placing onto the cleaned and dry concrete products

ALPHALITH® SEALING WET SIDE	CHARACTERISTICS	APPLICATION
ALPHALITH® StoneCare FS is applied to high-quality, predominantly colored or surface-treated concrete products, primarily high grade slab and paving blocks, as a color-intensifying and dirt-repellent protective sealant. ALPHALITH® StoneCare FS gives the treated surfaces an increased color brilliance and, depending on the variant, a slight (matt) to clear gloss effect, with enhanced water beading (pearl).	 improved brilliance of colour for coloured and surface treated concrete products significant improvement of colour stability silk matt appearance with slight wet effect minimized efflorescence reduction of the tendency to attract contamination and algae growth easier removal of dirt and stains 	ALPHALITH® StoneCare FS is to be applied on the wet side directly after pressing or on the dry side with additional drying.
ALPHALITH® StoneGloss S2 is applied primarily to coloured or surface treated concrete products as colour intensifying and stain protecting sealant. The treated surfaces appear significantly more brilliant.	improved brilliance of colour for coloured and surface treated concrete products significant improvement of colour stability silk mat appearance with slight wet effect minimized efflorescence reduction of the tendency to attract contamination	ALPHALITH® StoneGloss S2 is to be applied inline immediately after the washing cycle.
ALPHALITH® StoneGloss T is applied primarily to coloured or surface treated concrete products as colour intensifying and stain protecting sealant. The treated surfaces appear significantly more brilliant.	 improved brilliance of colour for coloured and surface treated concrete products significant improvement of colour stability silk mat appearance with slight wet effect minimized efflorescence reduction of the tendency to attract contamination and algae growth easier removal of dirt and stains water based high UV resistance high alkaline and water resistance 	ALPHALITH® StoneGloss T can be applied onto freshly demoulded concrete and onto hardened concrete surfaces. When applied in the production process after curing ALPHALITH® StoneGloss T needs to be hardened by IR-dnying before packaging. Weather resistance testet by BAM (Reference 7.5/27590-1).
ALPHALITH® StoneGloss NH is applied primarily to coloured or surface treated concrete products as colour intensifying and stain protecting sealant. The treated surfaces appear significantly more brilliant.	 improved brilliance of colour for coloured and surface treated concrete products significant improvement of colour stability silk mat appearance with slight wet effect minimized efflorescence reduction of the tendency to attract contamination and algae growth easier removal of dirt and stains water based high UV resistance high alkaline and water resistance 	ALPHALITH® StoneSeal NH can be applied onto freshly demoulded concrete and onto hardened concrete surfaces. When applied in the production process after curing ALPHALITH® StoneGloss NH needs to be hardened by IR-drying before packaging.
ALPHALITH® StoneSeal PA is applied primarily to coloured or surface treated concrete products as colour intensifying and stain protecting sealant. The treated surfaces appear significantly more brilliant. with a slight matt gloss.	improved brilliance of colour for coloured and surface treated concrete products significant improvement of colour stability silk mat appearance with slight wet effect minimized efflorescence reduction of the tendency to attract contamination and algae growth easier removal of dirt and stains	ALPHALITH® StoneSeal PA can be applied after demoulding, suitable for instantly washed surfces.



ALPHALITH® SEALING DRY SIDE	CHARACTERISTICS	APPLICATION
ALPHALITH® StoneSeal GLS	> durable dirt and stain repellent effect aga	ainst oil ALPHALITH® StoneSeal GLS is to be applied on the

is used as long-lasting oil, water, dirt and stain repellent impregnating sealant for high grade concrete products, primarily high grade slab and paving blocks, often with surface treatment, like e.g. shot-blasting or curling.

Oil- and, water-based liquids that result in staining, such as vegetable oil, machine oil, ketchup, mustard, coffee and soft drinks etc. are repelled on the surface and can be easily

This durably intensifies the surface appearance of the sealed products.

are used as long-lasting oil, water, dirt and stain repellent

ALPHALITH® StoneSeal Premium HC

treatment, like e.g. shot-blasting or curling.

ALPHALITH® StoneSeal Premium HC-W

- and water-based soiling
- easy removal of dirt and stains
- intensification of the surface appearance with a subtle sheen effect
- colour intensification with a slight wet look
- minimized tendency towards efflorescence, contamination and algae growth
- water based
- > high UV resistance
- > high alkaline and water resistance

"dry side" of the production line after curing and needs to be hardened by IR-drying before packaging. Weather resistance testet by BAM (Reference 7.5/27590-1).

ALPHALITH® StoneSeal Premium HC | HC-W are to be > durable dirt and stain repellent effect

impregnating sealant for high grade concrete products, primarily high grade slab and paving blocks, often with surface

Oil, water, and staining liquids are repelled on the surface and can be easily removed. This durably intensifies the surface appearance of the sealed products.

- easy removal of dirt and stains
- intensification of the surface appearance with a subtle sheen effect
- colour intensification with a slight wet look
- minimized tendency towards efflorescence, contamination and algae growth
- water based
- high UV resistance
- high alkaline and water resistance

applied on the "dry side" of the production line after curing and needs to be hardened by IR-drying before packaging. Weather resistance testet by BAM (Reference 7.5/27590-1).

ALPHALITH® StoneSeal UV-FDS ALPHALITH® StoneSeal UV FDW

are used as long-lasting oil, water, dirt and stain repellent impregnating sealant for high grade concrete products, primarily high grade concrete block paving, flags and slabs, often with surface treatment, like e.g. shot-blasting or curling.

Oil- and water-based liquids that result in staining, such as vegetable oil, machine oil, ketchup, mustard, coffee and cola drinks etc. are repelled on the surface and can be easily removed. This durably intensifies the surface appearance of the sealed products.

- durable dirt and stain repellent effect against oil | ALPHALITH® StoneSeal UV-FDS | UV FDW are to be and water-based contamination
- easy removal of dirt and stains
- intensification of the surface appearance with a subtle sheen effect
- colour intensification with a slight wet look
- minimized tendency towards efflorescence, contamination and algae growth
- fast-drying (reduction of drying energy)
- improved mechanical durability due to additional UV-curing
- high alkaline and water resistance

applied on the "dry side" after curing and needs to be hardened by IR-drying and subsequent UV-curing before packaging. Weather resistance testet by BAM (Reference 7.5/27590-1).

LithoTop® COATING BASE-COAT | TOP-COAT

CHARACTERISTICS

APPLICATION

LithoTop® Grundlack HM LithoTop® Decklack HM

LithoTop® base-coat HM and LithoTop® top-coat HM are used as transparent base- and top coats for top-quality two-layer concrete block finishings. The two-layer LithoTop® Paint System HM, which includes the LithoTop® base-coat HM and LithoTop® top-coat HM or LithoTop® top-coat RM offers highly

effective protection of concrete block products against weather effects, soiling of any type, greening and chemicals.

Thanks to the distinct easy-to-clean effect, soiling and spots are significantly easier to remove. The LithoTop® Paint System features high resistance, scratch resistance and

- > significantly intensified color tone
- > very high weather resistance
- very good protection against soiling
- > good chemical resistance
- > very good crack resistance
- y good slip resistance

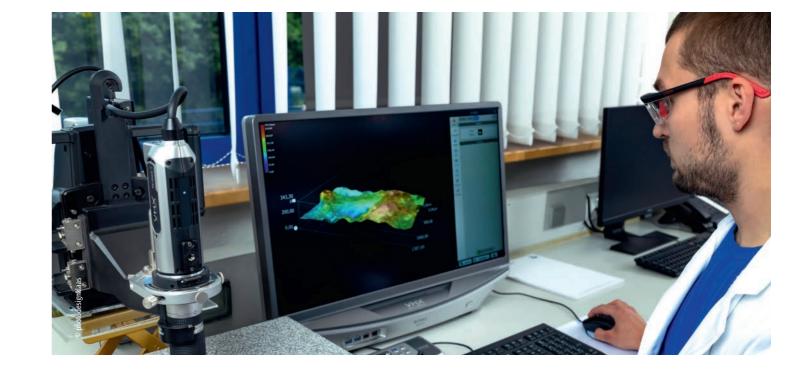
LithoTop® Grundlack HM | LithoTop® Decklack HM for tow-layer UV-curing coatings.

LithoTop® UV Primer LithoTop® UV-InterCoat LithoTop® UV-TopCoat

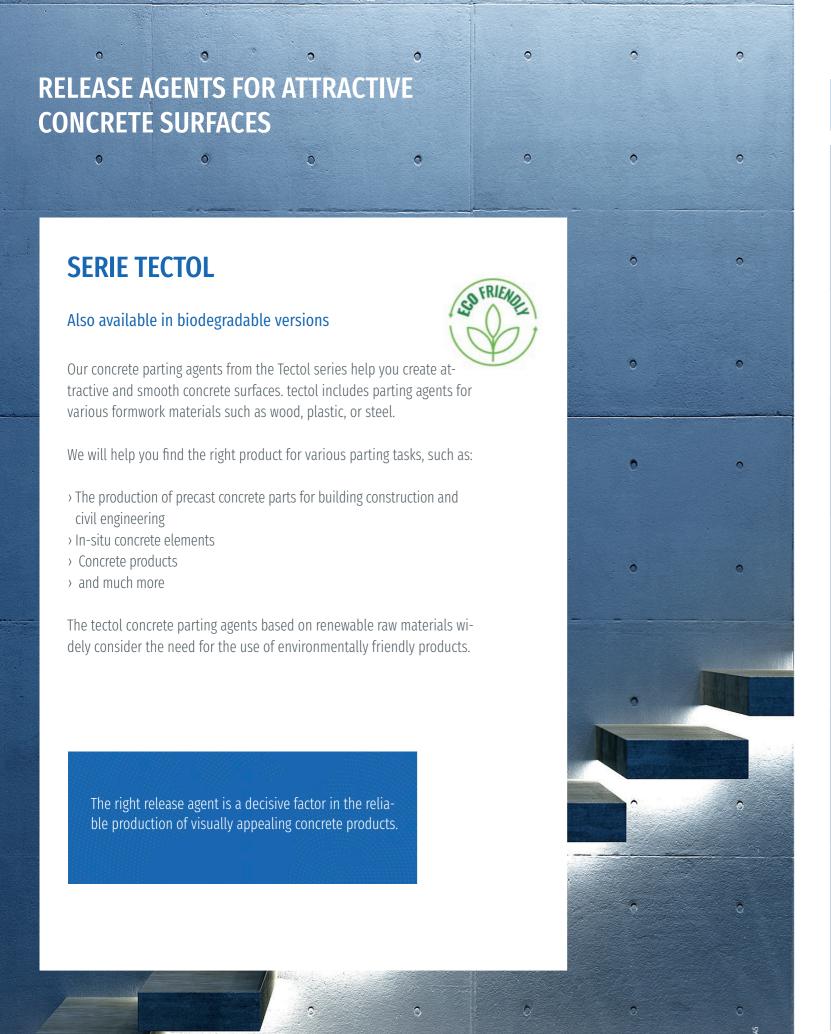
The three-layer LithoTop® UV coating system, consisting of LithoTop® UV base coat. LithoTop® UV intermediate coat and LithoTop® UV top coat, offers highly effective protection protection of concrete block products against weathering, contamination of any kind, greening and chemicals. Due to the distinctive easy-to-clean effect soiling and stains are much easier to remove. The LithoTop® UV coating system is characterized by its high durability, scratch resistance and long service life.

- > significantly intensified color tone
- > very high weather resistance
- very good protection against soiling
- good chemical resistance
- very good crack resistance good slip resistance

LithoTop® UV Primer | LithoTop® UV-InterCoat | LithoTop® UV-TopCoat for three-layer 100% UV coatings. LithoTop® coatings are applied at the factory on the dry side with active UV curing.







CHARACTERISTICS tectol RELEASE AGENTS **APPLICATION** BIODEGRADABLE production boards made of hardwood and softwood > ready to use tectol BioBrettöl y good separation effect production boards made of plastic is a ready-to-use, environmentally friendly release and prevents the caking of concrete blocks on the > steel production sheets treatment oil for production boards and production sheets production boards and sheets in concrete block production. economical usage biodegradable based on renewable raw materials > very good separation effect production boards made of hardwood and softwood tectol Bioemulsion economical usage production boards made of plastic is an environmentally friendly water-soluble separating > steel production sheets easy to apply emulsion for wooden formwork and based boards in concreenvironmentally friendly | biodegradable te block production. tectol Bioemulsion has no mineral oils or solvents. > all types of absorbent and non-absorbent formwork > easy demoulding tectol BioCast EV-A > low-viscosity is a low-viscosity, environmentally friendly and biode-> economic in use gradable release agent for absorbent and non-absorbent > biodegradable shutterings of all types. The product is free of flavors and > environmentally friendly has a pleasant odor. > universally applicable > universally applicable tectol Supercast 1020 economical in consumption is a release agent for instant demoulding of pipes, manhominimized pore formation generates clean and even surfaces can be used up to 60°C formwork temperature biodegradable > easy demoulding universally applicable tectol Supercast 1100 DE > reduces pores and shrink holes is a high-performance release agent for direct formwork > high surface qualities demolding. The ready-to-use release oil is biodegradable. > corrosion protection > ready for use > biodegradable economic in use > all types of absorbent and non-absorbent formwork tectol BioCast Kontzentrat | tectol BioCast easy demoulding **Emulsion**

results in clean, uniform and almost flawess

biodegradable, based on renewable raw

surfaces

materials

are environmentally friendly, rapidly biodegradable products

for absorbent and non-absorbent formwork and for the

treatment of production boards in concrete block produc-

tectol BioCast Konzentrat | tetol BioCast Emulsion are free of

mineral oils or solvents.



tectol RELEASE AGENTS	CHARACTERISTICS	APPLICATION
tectol Brettöl P 12 is a eady-to-use release and maintenance oil for boards and sheets in concrete products manufacturing.	 ready-to-use easy demoulding prevents concrete residues on the boards and sheets economical use 	 > production boards made of hardwood and softwood > production boards made of plastic > steel production sheets
tectol Trennmittelkonzentrat M is a water-soluble parting agent concentrate proven in practice with an all-purpose application in projects where absorbent, i.e. planed or non-planed wooden formwork, as well as particle boards and fiber material are used in the concrete industry. tectol Trennmittel Konzentrat M guarantees perfect separati- on of concrete components from the wooden formwork.	 mineral oil-based very economi in use easy and fast demoulding smooth and flawless surfaces 	concrete surfaces on construction sites (in-situ concrete execution) concrete products which cure on wooden boards impregnation of prefabricated slabs construction site formwork production of exposed concrete outstanding separation; once the concrete is cured, the release film guarantees easy, quick and clean formwork strippin smooth pore-free surfaces no stain formation when used
tectol WTC is a special, ready-to-use, water-based release agent for achieving optimal exposed concrete surfaces in the production of large and small-format precast concrete parts using the wetcast process.	 economical in use very good release effect rapid release film formation no caking 	tecol WTC was specially developed for the production of small-format concrete parts such as paving, slabs, steps, etc. using the wetcast process.
tectol Trennemulsion GFC is a release Emulsion concentrate on basis of mineral oil for plane and rough-sawn wooden pallets, as well as for production boards in the concrete industry.	 mineral oil-based very economic in use easy and fast demoulding avoids sticking of the concrete products on wooden and plastic boards and thus defects of the pallets 	for concrete surfaces in the construction area (cast-in-place concrete construction) boards (wood or plastic) in concrete products manufacturing for the in-factory impregnation of site formwork (by immersion)
tectol Trennemulsion GF is a release Emulsion concentrate on basis of mineral oil for plane and rough-sawn wooden pallets, as well as for production boards in the concrete industry.	 mineral oil-based very economic in use easy and fast demoulding avoids sticking of the concrete products on wooden and plastic boards and thus defects of the pallets 	for concrete surfaces in the construction area (cast-in-place concrete construction) boards (wood or plastic) in concrete products manufacturing for the in-factory impregnation of site formwork (by immersion)
tectol Trennemulsion OK is a ready-to-use label-free release emulsion especially for planed and rough-sawn wood shutterings. In addition, the product is used on boards (wooden and plastic boards) in the concrete block industry.	 mineral oil-based ready-to-use very economic in use easy and fast demoulding 	for concrete surfaces in the construction area (cast-in-place concrete construction) boards (wood or plastic) in concrete products manufacturing for the in-factory impregnation of site formwork (by immersion)
tectol Trennmittelkonzentrat OK Concentrate for the preparation of a label-free release emulsion. This emulsion is universally applicable, especially for planed and rough-sawn wood shutterings. In addition, the product is used on boards (wooden and plastic boards) in the concrete block industry.	 mineral oil-based very economic in use easy and fast demoulding uniform and almost flawless surfaces 	 › for concrete surfaces in the construction area (cast-in-place concrete construction) › boards (wood or plastic) in concrete products manufacturing › for the in-factory impregnation of site formwork (by immersion)

tectol release agents	CHARACTERISTICS	APPLICATION
tectol Supercast ES 100 is a special water-based, ready-to-use mould release agent for high-quality fair-faced concrete surfaces in the production of large and smallsized precast concrete elements.	versatile economical usage rheology-optimized suitable for fair-faced concrete results in almost flawless surface quality suitable for mould temperatures up to 60°C	 > for all usual formworks > steel formworks > film- and plastic-coated plates > polysulfide stencils > ABS coated film Systems as well as PU-moulds
tectol Supercast ES 350 is a special water-based, ready-to-use mould release agent for high-quality fair-faced concrete surfaces in the production of large and smallsized precast concrete elements.	 versatile economical usage rheology-optimized suitable for fair-faced concrete results in almost flawless surface quality suitable for mould temperatures up to 60°C 	 > for all usual formworks > steel formworks > film- and plastic-coated plates > polysulfide stencils > ABS coated film Systems as well as PU-moulds

CHADACTEDICTICS

tectol RELEASE AGENTS WITH CLEANING EFFECT

+-I DELEACE ACENT



CHARACTERISTICS

APPLICATION

tectol CoatRelease 2

tectol CoatRelease 2 is a ready-to-use, special release agent for production boards in concrete products coating process. The application of tectol CoatRelease 2 before coating concrete products significantly reduces sticking of coating material to the production boards. Excess material gets macerated and easy to remove.

tectol CoatRelease 2 is free from mineral oils and readily biodegradable.

- > effective release action
- > easier removel of coating material overspray
- > to be applied easily
- > economical in use
- > readily biodegradable

> special release agent for production boards in concrete products coating process

For optimal cleaning results, we recommend the we recommend the Crust Cracker® from Weber Bürstensysteme GmbH.

tectol CoatRelease

is a ready-to-use, special release agent for production boards in concrete products coating process. The application of tectol CoatRelease before coating concrete products significantly reduces sticking of coating material to the production boards. tectol CoatRelease is free from mineral oils or solvents.

- significantly reduces sticking of sealers or coating on the boards
- easy cleaning of the boards from polymer residues
- › effective release action
- > to be applied easily
- > economical in use
- > readily biodegradable

 special release agent for production boards in concrete products coating process

For optimal cleaning results, we recommend the we recommend the Crust Cracker® from Weber Bürstensysteme GmbH.





Preparing the application of special release agents, we recommend cleaning the production boards with the Crust Cracker®.







Further information and special brushes for concrete block production: www.weberbrushes.com



tectol RELEASE AGENTS	CHARACTERISTICS	APPLICATION
tectol Supercast 1000 is a special, highly effective release agent, particularly suitable for the direct de-moulding of concrete components. It contains a relevant proportion of oil from natural renewable sources.	 universally applicable economical in consumption minimized pore formation generates clean and even surfaces includes corrosion protection for use on steel formwork 	tectol SuperCast 1000 is used universally applicable but espacially used as a release Agent for direct demoulding,e.g. in the manufacturing of pipes, manhorings and cones.
tectol Supercast 3000 tectol Supercast 3000 is a special, high-grade release agent for high-quality fair-faced concrete precast elements. The use of tectol Supercast 3000 results in almost flawless concrete surfaces even on vertical and complex moulds. tectol Supercast 3000 creates a thin, even and stable layer of release agent, which prevents sticking of concrete even on vertical and complicated moulds. Moulds can be easily removed and usually need not be finished off later.	 versatile economical usage recommended for fair-faced concrete elements suitable for mould temperatures up to 60°C 	 › for all usual formworks › planed timber formworks › steel formworks › film and plastic-coated plates › polysulfide stencils › ABS coated film systems
tectol Supercast 3100 Special, ready-to-use mould release agent for high quality fair-faced concrete surfaces in the production of large and small-sized precast concrete elements	 versatile economical usage suitable for fair-faced concrete results in almost flawless surface quality suitable for mould temperatures up to 60°C 	 › for all usual formworks › planed timber formworks › steel formworks › film and plastic-coated plates › polysulfide stencils › ABS coated film systems
tectol Supercast 3300 is a universal concrete release agent preferably for the use in precast concrete plants. It is suitable for use on all absorbent and non-absorbent formwork.	 suitable for mold temperatures up to 70°C universal application suitable for exposed concrete prevents pore formation no interference with plaster adhesion, adhesives and paint adhesion contains a strong corrosion protection for steel moulds 	 › for all usual formworks › rough sawn and planed wood formwork › steel formwork › Film-and plastic coated plates › polysulfide matrices › ABS coated film systems
tectol Supercast 3500 is a universal release agent for all absorbent and non- absorbent moulds. The product may also be used as a mixer protection and machine care oil.	 can be sprayed without disturbing oil mist formation economic in use no discoloration of concrete surfaces (by proper application) easy demoulding prevents surface damages special corrosion protection additives reduce the risk of rust formation 	 › for absorbent and non-absorbent moulds › rough-sawn and planed wood moulds › film- and plastic-coated boards, steel- and plastic moulds
tectol Supercast 6409 SB was developed as a low-odor, solvent-based release agent. The product is suitable for use in ceiling- and horizontal wall production of precast concrete elements with the highest exposed concrete quality.	 › developed for high exposed concrete qualities › reduces the formation of pores to a minimum › uniform and clean surfaces › no interference with plaster adhesion, adhesives and paint adhesion 	 > for use in ceiling and horizontal wall production of precast concrete elements > for absorbent and non-absorbent moulds



MAINTENANCE PRODUCTS BIODEGRADABLE



CHARACTERISTICS

tectol Bio Mischerschutz

is a special biodegradable ready-to-use protective maintenance oil for mixers, molds and machines in the concrete block industry.

- > biodegradable
- > ready to use
- > significantly reduced cleaning effort with reduced labor costs
- > active corrosion protection
- > longer service life of treated parts

tectol Bio Mischerschutz HD

is a high-quality special, ready-to-use protective and maintenance oil for mixers, moulds and machines in the concrete block industry for use on dry and wet surfaces. When applied regulary the cleaning effort and the associated labour costs are significantly reduced.

- > based on renewable raw materials
- > excellent adhesion on dry and wet metal surfaces
- > prevents concrete stains
- > facilitates fast and easy cleaning
- removes existing concrete stains when regulary used
- > effectiv rust prevention

tectol Bio Mischerschutz GT

is a high-quality special, ready-to-use and biodegradable protective and maintenance oil for mixers, moulds and machines in the concrete block industry for use on dry and wet surfaces. When applied regulary the cleaning effort and the associated labour costs are significantly reduced.

- > based on renewable raw materials
- > significantly reduced cleaning effort with reduced labor costs

> significantly reduced cleaning effort with reduced labor costs

- > active corrosion protection
- > longer service life of treated parts
- > low operating costs
- > biodegradable

MAINTENANCE PRODUCTS

CHARACTERISTICS

tectol Mischerschutz und Maschinenpflege

is a special, ready-to-use protective maintenance oil for mixers, molds and machines in the concrete industry. When applied regulary the cleaning effort and the associated labour costs are significantly reduced.

- > active corrosion protection
- > longer service life of treated parts
- > low operating costs

tectol Mischerschutz HD

is a high-quality special, ready-to-use protective and maintenance oil for mixers, moulds and machines in the concrete block industry for use on dry and wet surfaces. When applied regulary the cleaning effort and the associated labour costs are significantly reduced.

- > excellent adhesion on dry and wet metal surfaces
- > prevents concrete stains
- > facilitates fast and easy cleaning
- > removes existing concrete stains when regulary used
- > effectiv rust prevention

CLEANING PRODUCTS

CHARACTERISTICS

CITHOLITH Ölfleckenentferner

removes oil stains from concrete parts, paving stones, exposed concrete, screed and Natural stones in driveways, garage and workshop floors, parking lots and sidewalks.

CITOLITH Ölfleckentferner consists of a special combination of oil and bitumen-dissolving substances, as well as selected oil-binding components, so that even the heaviest greasy and oily contaminants are removed.

CLEANING PRODUCTS

CHARACTERISTICS

CRETEX 100

Concrete stain and efflorescenceremover - concentrate for acid-resistant natural stone and for concrete products.

Fast and reliable removal of:

> concrete-,cement,-lime and efflorence stains

CRETEX 100 T

dissolves concrete residues as well as cement and lime films. These can simply be brushed or sprayed off. At the same time, CRETEX 100 T intensively cleans concrete and natural stone coverings from general soiling.

Fast and reliable removal of:

> concrete-,cement,-lime and efflorence stains

 $\,\,$ for resistant paving and flooring of natural and concrete stone

CRETEX 100 T is specially formulated to penetrate deep into incrustations and remove even the most stubborn deposits.

CRETEX 130 T

dissolves concrete residues as well as cement and lime films. These can simply be brushed or sprayed off. At the same time, CRETEX 130 T intensively cleans concrete and natural stone coverings from general soiling.

Fast and reliable removal of:

concrete-,cement,-lime and efflorence stains

for resistant paving and flooring of natural and concrete stone as well as mixers and ready mix concretetrucks

CRETEX 130 T is specially formulated to penetrate deep into incrustations and remove even the most stubborn deposits.

CRETEX 320 SF

is a non-corrosive biodegradable cleaner exempt from labeling, which can be used among other things for the gentle removal of efflorescence and concrete residue.

save cleaning of concrete products as well as molds and tools

CRETEX Bio-Aktiv CS

loosens residues of concrete, cement, lime and calcium-carbonate efflorescence though that they may easily be brushed off or flushed off with water.

Fast and reliable removal of:

 $concrete\hbox{-}, cement\hbox{,-} lime and efflorence stains from resistant natural stone or concrete surfaces$

CITOPAL HD

is an alkaline universal cleaner concentrate, suitable for a wide range of cleaning applications, in particularly also for high-pressure cleaning.

CITOPAL HD is a liquid, mild alkaline special cleaning agent with washing-active substances, high content of complexing agent and high degreasing power. The product guarantees an intensive cleaning effect and is extremely gentle on paint, chrome and rubber parts. CITOPAL HD is biodegradable, prevents annoying lime deposits and contains no organic solvents.

CITOPAL HD is suitable for:

- > fleet cleaning | construction machinery cleaning
- > industrial cleaning
- > cleaning of all types of floor coverings such as PVC, tiles or natural stone
- > pure also suitable for rim cleaning

BIODEGRADABLE GRANULATE SCRATCH AND LAYER PROTCTION FOR CONCETE BLOCK PRODUCTS

PAVELITH® INTERLAY

Biodegradable granulate

Our biodegradable litter granulate from the PAVELITH® series offers an ecologically valuable alternative to classic layer protection.

Your advantages when using PAVELITH® Interlay:

- > Efflorescence reduction through air circulation
- > Scratch protection
- > Biodegradable (contact with water starts decay)
- > Product can be disposed of with household waste or compost
- > Avoidance of waste by not using fleece and nets as layer protection
- > Concrete block products are protected from damage, abrasion, moisture, and dirt

We currently offer three different types of PAVELITH® InterLay. We would be happy to help you select the right product for your application.

We currently offer three different types of PAVELITH® InterLay. We would be happy to help you select the right product for your application.







PAVELITH® InterLay RB-1	CHARACTERISTICS:
Form:	solid
Color:	grey
Shelf life:	2 years

PAVELITH® InterLay RB-1 is a mix of biodegradable polymers and natural minerals.

PAVELITH® InterLay NP-1	CHARACTERISTICS:
Form:	solid
Color:	grey
Shelf life:	2 years

PAVELITH® InterLay NP-1 is a mix of biodegradable polymers and natural minerals

PAVELITH® InterLay FK-30	CHARACTERISTICS:
Form:	solid
Color:	white
Shelf life:	2 years

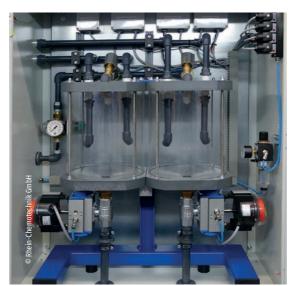
The polymer used is partly of biogenic origin and completely biodegradble.











DOSIMATIC EK 2-5 P

The volumetric admixture dosing system DOSIMATIC EK 2-5 P is based on the principle of level measurement. The dosing tank contains 4 adjustable level probes that are adjustable in terms of their sensitivity. This means that you automatically control up to 4 different dosing quantities. In addition, you can set any number of dosing quantities by adjusting the level probes. The DOSIMATIC EK 2-5 P is mounted in a sheet steel housing and is thus protected against dust and moisture.

DOSITRONIC TYP EK 4-10 P

The DOSITRONIC Type EK 4-10 P admixture scale works with a load cell in accordance with the strain gage principle. The weighing container is mounted on a tubular steel frame such that no significant lateral forces are introduced. 4 fill lines are guided from the top in the weighing container. Each fill line has a mechanical pressure relief valve. The net weight is 10 kg. The DOSITRONIC Type EK 4-10 P is mounted in a sheet steel housing and is thus protected against dust and moisture.

DOSITRONIC TYP EK 4-20 P

The DOSITRONIC Type DK 4-20 P admixture scale works with a load cell in accordance with the strain gage principle. 4 fill lines are guided from the top in the double-chamber weighing container, 2 fill lines each per weighing chamber. The net weight is 2 x10 kg. Each fill line has a mechanical pressure relief valve. The DOSIMATIC DK 4-20 P is mounted in a sheet steel housing and is thus protected against dust and moisture.

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CONTACT

We are happy to be here for you

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Business hours:

You can reach us at the following opening hours:

Mo – Thu: 08.00 till 17.00 Fri 08.00 till 16.00







Contact persons:

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Region South-West

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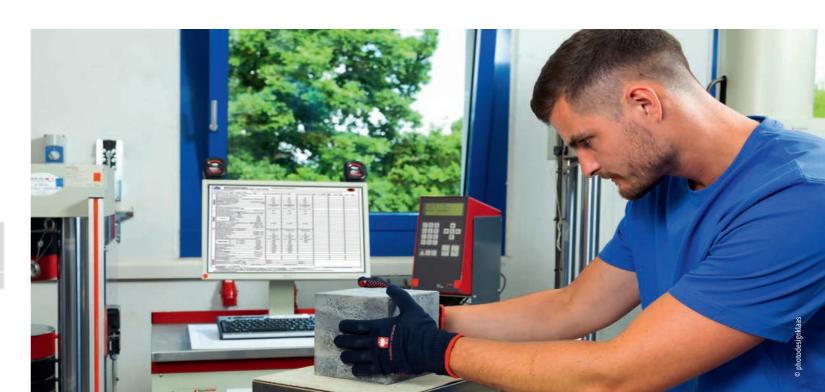




Image references

ompany Images: Photodesign Klaas© | Dieter Klaa

We would like to sincerely thank Hermann Meudt Betonsteinwerk Gmbl in 56414 Wallmerod for the friendly support regarding the photo work.

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