COLORFRESH[®] effect

Protective coating for concrete

- Water- and dirt-repellent
- creates a permanent wet-look surface finish (non-gloss)



Fields of application:

COLORFRESH[®] *effect* is a new development, based on the well-known product COLORFRESH[®] *intensiv*. **COLORFRESH**[®] *effect* has been developed for the protection of architectural and decorative concrete used for walls and floors, e.g. cast-in-place concrete, precast concrete elements, artificial stone, paving stones etc., which require protection against soiling, efflorescence, loss of colour, weathering, frost damage etc. Suitable for indoor or outdoor application. Applicable on all kinds of concrete surfaces and especially for exposed aggregate, acid-etch, sand-blast/shot-blast, bush-hammered, polish/grind ... finish.

COLORFRESH® *effect* creates adds a permanent wet-look effect (without adding a glossy shine) to the concrete surface.



Left: unprotected

Right: protected with COLORFRESH[®] effect



Left: unprotected water penetrates the surface easily Right: protected with COLORFRESH[®] effect water is repelled

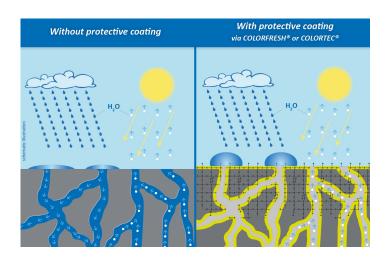
More pictures of protected concrete surfaces can be found in our online <u>Gallery</u> and a video showing the "repelling" effect of **COLORFRESH®** *effect* in our online <u>video gallery</u>.

Product characteristics:

- solvent-free
- creates a permanent wet-look visual effect
- water-repellent
- dirt-repellent
- breathable
- alkaline-resistant
- applicable on moist and dry surfaces
- weather resistant
- non-adhesive
- fast drying
- long lasting
- low consumption rate per m²
 UV-resistant

Advantages:

- user-friendly (water-based)
- protects against efflorescence (primary and secondary efflorescence)
- protects against dirt and stains
- reduces frost and weathering damage
- protects against colour fading
- protects against soiling during storage, installation
- hides colour changes within the concrete surface
- applicable immediately after surface finishing
- applicable on new and on older surfaces
- suitable for "in-line" application
- high resistance to abrasion
- low additional cost per m²



COLORFRESH[®] effect (Page 1 of 3) Created on 24.11.2015, last modified on 23.06.2020 fro

Left: unprotected Right: protected Detailed explanation in our brochure "surface protection".





Consumption:

Depending on the absorbency of the surface approx. 120 gr/sqm

Packaging:

10-30-120-200-1000 liter pail/drum/barrel/ IBC bulk container

Storage:

Store inside a suitable warehouse frost-free (min +5°C, max +25°C) not outdoors. Protect against frost. Can be stored in original, closed container for approx. 24 months.

ENQUIRY

HEBAU GmbH · An der Eisenschmelze 13 · D-87527 Sonthofen Tel. +49/(0)8321/6736-0 · Fax. +49/(0)8321/673636 · mail@hebau.de · www.hebau.de

Instructions for use:

Usual precautions and actions when handling chemicals should be observed (e.g. no eating, drinking, or smoking at the place of work). Additional instructions, which can be found on the corresponding product labelling or in the Safety Data Sheet, must be observed. If you do not have a copy of the current Safety Data Sheet, we will be pleased to send you one.

The surfaces to be protected may be moist (no standing water) or dry. The surface should be absorbent, clean, dust-free and frost-free and should offer sufficient adhesion. Old resp. weathered surfaces should be cleaned thoroughly beforehand so that no residue remains. If suitable, we recommend the application of <u>HEBAU CEMCLEAN</u> (see instructions for application in the technical information sheet, pilot tests necessary). **COLORFRESH®** *effect* should be applied economically in a one-coat application with a suitable roller, brush or spray-gun and is applicable for both horizontal and vertical surfaces.

The application of **COLORFRESH®** *effect* on fair-faced concrete with a "smooth, form finish" demands high standards in the application procedure in order to allow good surface penetration and adhesion by avoiding release agent residue, dirt, dust or micro cracks.

When applying to vertical surfaces **COLORFRESH®** *effect* should always be applied from the bottom to the top in a zigzag movement! By horizontal application no puddles should occur. If drips or puddles do occur, they should be removed immediately. Parts which are not to be protected (e.g. windows) should be covered/taped. The treated surfaces should be protected against rain and frost during the drying time (approx. 24 hours). **COLORFRESH®** *effect* should not be applied by temperatures below +5°C. Avoid direct sunlight during application, e.g. if applied outdoors during high ambient conditions.

Soiling which occurs on surfaces previously protected by **COLORFRESH®** *effect* should be cleaned off immediately (especially aggressive soiling, e.g. red wine). It is usually sufficient to use warm water and a brush resp. a high pressure sprayer. A soft household cleaning agent may be added if necessary. If a chemical agent is used for the cleaning, for example to remove stains off concrete paving, it is possible that this results in a visible roughening of the surface.

By the application of **COLORFRESH®** *effect* in standard production lines of prefabricated concrete, for example terrazzo tiles and similar, and directly "in-line", meaning immediately prior to packaging, it should be ensured that the surfaces to be treated are suitable and free of processing residue. HEBAU technicians will be pleased to check your individual set-up, also regarding the drying, packaging and storing situation and will give a certain testing recommendation accordingly. A fully automatic spraying device has been specially developed for this product, and can be offered through HEBAU on request.

In order not to impair the function and interaction of the **COLORFRESH**[®] *effect* with the surface, no waterrepellent/hydrophobic additives/admixtures should be used in the concrete. We therefore exclude any liability for defects which are based on the processing methods and the concrete mix designs used.

Ø

Please note, that it is always necessary to carry out pilot tests which realistically correspond to the planned production process and application procedure. When applying to outdoor surfaces, testing should also take the natural weathering into account and allow for an adequate period of observation.

Legal notice:

The technical information contained herein, in particular relating to the function, use and handling of our products, is given to the best of our knowledge and is based on our present knowledge and experience of the products when appropriately stored and handled, and applied under normal conditions in accordance with the standard fields of application, as described in page 1. Due to the large variety of possible use and application scenarios, this data sheet raises no claim to completeness, but is solely intended to provide a non-binding decision support, which needs to be reconfirmed by the end-user through pilot tests. Pilot tests are always necessary and should be carried out following the advice given in the current Product Data Sheet and under realistic practical conditions, i.e. conditions must realistically correspond to the planned production process and application procedure. Case-related acquired knowledge is not directly transferable to similar applications. Product specifications are subject to alterations without notice.

Only the most recent issue of the Product Data Sheet is valid, which will be supplied on request or can be found on our website under www.hebau.de. Illustrations in our data sheets, brochures etc. are merely exemplary and not binding. Photos may have been edited.

We guarantee for the perfect quality of our material according to our specifications. We do not take any liability resp. warranty for the desired end result, as we solely act as supplier of the products and the application of the products and other influencing factors are beyond our control and our field of responsibility.

Our General Terms and Conditions apply. This information is valid for professional users. Our products are not recommended for private end-users.



General Information:

- The durability of the COLORFRESH® effect coating depends on a large number of parameters (concrete mix design and surface, application, weather ...) but usually lies between 5 and 10 years.
- If a fading of the protective effect is noticed, we recommend the cleaning and subsequent re-coating of the surface with COLORFRESH[®] effect.
- Constant contact with rubber/ plastics which contain softening agents, e.g. tires, floor mats etc. may impair the COLORFRESH® effect.
- COLORFRESH® effect is not suitable for application on polished/grinded, coated or other surfaces which do not offer sufficient absorbency.

ENQUIRY

Text recommendation for invitations to tender:

Protect concrete surface against weathering, resp. general soiling, moss etc. through a hydrophobic protective coating etc., with

COLORFRESH® *effect* from **HEBAU GmbH**, or equivalent, solvent-free protective coating for concrete

Optical effect after drying: colour enhancing, similar to wet-look

Application: in one step, see instructions for application.

Consumption: depending on the absorbency of the surface, approx, 120 ml/sqm.

Surface in sqm:

Hazard + precautionary statements according to CLP regulation / (EC) No 1272/2008

The product is not classified according to the CLP regulation (Classification, Labelling and Packaging). Usual precautions and actions when handling chemicals should be observed. Please observe the Safety Data Sheet.

Overview: Protective coating agents for concrete surfaces



Areas opplication:Image of the second of the se		COLORFRESH® intensiv	COLORFRESH [®] effect	COLORTEC [®] MAX	COLORTEC [®] finish	PROWALL II
watalyficaciesIIIindoorsIIIIIoutdoorsIIIIIISutable for following types of concrete:IIIIIIpredarizated (precast) elementsIIIIIIIIready mixed concrete (parkers, blocks, bricks, slabs, tiles)III <t< td=""><td>Areas of application:</td><td></td><td></td><td></td><td></td><td></td></t<>	Areas of application:					
indexisIIIIIautionsIIIIIISulable for following types of concreteIIIIIIIprelabricated (precarl) elementsIII<	floors/paving	✓	✓	✓	0	-
outdoorsIIIISubtractionSubtractionSubtractionIself-compacting (east-hplace)IIIIself-compacting (east-hplace)IIIIIself-compacting (east-hplace)IIIIIIself-compacting (east-hplace)IIIIIIIself-compacting (east-hplace)II <td< td=""><td>walls/facades</td><td>✓</td><td>\checkmark</td><td>\checkmark</td><td>\checkmark</td><td>\checkmark</td></td<>	walls/facades	✓	\checkmark	\checkmark	\checkmark	\checkmark
Subable for following types of concrete: V	indoors	✓	✓	✓	✓	✓
prefabricated (precast) elements········ready mixed concrete (assis-iplace)··	outdoors	✓	✓	✓	✓	\checkmark
prefabricated (precast) elements········ready mixed concrete (assis-iplace)··	Suitable for following types of concrete:					
Self-Compacting (self-leveling) concrete I		✓	✓	✓	✓	\checkmark
self-compacting (self-leveling) concrete···	ready mixed concrete (cast-in-place)	✓	0	0	✓	✓
cast stone✓✓✓✓✓wetcast concrete✓✓✓ØØØtorrazzo✓✓ØØØØØdecorative concrete in-situ✓ØØØØØØSutable for following types of surface:said-blastedØØØØØØØsaid-blasted / shot-blasted✓ØØ </td <td>self-compacting (self-levelling) concrete</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td>	self-compacting (self-levelling) concrete	✓	✓	✓	✓	✓
wetcast concrete ✓ ✓ Ø ✓ Ø terrazo ✓ ✓ ✓ Ø Ø Ø Sutable for following types of surface: smooth fom -finish or forminer-structured ✓ Ø <td>dry-cast concrete (pavers, blocks, bricks, slabs, tiles)</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>0</td> <td>0</td>	dry-cast concrete (pavers, blocks, bricks, slabs, tiles)	✓	✓	✓	0	0
terrazo V V V O O decorative concrete in-situ V O O O O Suteble for following types of surface: V O O O O smooth form-finish or formliner-structured V O V	cast stone	✓	✓	✓	✓	✓
Interview Image Image <thimage< th=""> Image Image</thimage<>	wetcast concrete	\checkmark	✓	0	\checkmark	0
Suitable for following types of surface: Suitable for following types of surface: smooth form-finish or formliner-structured \fraceleftic \leftic	terrazzo	✓	✓	✓	0	0
smooth form-finish or formliner-structuredIOOIIacid etchededII	decorative concrete in-situ	✓	0	0	0	-
acid etcheded ··· ··· ··· ··· sand-blasted / shot-blasted ··· ··· ··· ··· ··· sand-blasted / shot-blasted ··· ··· ··· ··· ··· sexposed-aggregate ··· ··· ··· ··· ··· bush-hammered ··· ··· ··· ··· ··· polished / groud / honed ··· ··· ··· ··· ··· Product characteristics: ··· ··· ··· ··· ··· colour-enhancing ··· ··· ··· ··· ··· ··· waterbade	Suitable for following types of surface:					
and blasted \checkmark \checkmark \checkmark \checkmark \checkmark exposed-aggregate \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark bush-hammered \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polised / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark Product characteristics: \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark matt (invisible) finish \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark creates a silky sheen \checkmark \checkmark \bullet \bullet \bullet \bullet creates a vel-ook finish O \checkmark \bullet \bullet \bullet \bullet waterbased / solvent-free \checkmark \checkmark \checkmark \checkmark \bullet waterbased / solvent-free \checkmark \checkmark \checkmark \checkmark \checkmark water-regellent / hydrophobic \checkmark \checkmark \checkmark \checkmark \checkmark dit-regellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark uit-regellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark uit-regellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark </td <td>smooth form-finish or formliner-structured</td> <td>✓</td> <td>0</td> <td>0</td> <td>\checkmark</td> <td>\checkmark</td>	smooth form-finish or formliner-structured	✓	0	0	\checkmark	\checkmark
exposed aggregate \checkmark \checkmark \checkmark \checkmark \checkmark bush-hammered \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark polished / groud / honed \checkmark <	acid-etcheded	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	\checkmark	✓
Image of the second o	sand-blasted / shot-blasted	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	\checkmark	✓
International poished/groud / nonedImage: constraint of the second s	exposed-aggregate	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	✓	✓
Product characteristics:matt (invisible) finish\low \low \low \low \low \low \low \low	bush-hammered	$\checkmark\checkmark$	$\checkmark\checkmark$	$\checkmark\checkmark$	✓	\checkmark
matt (invisible) finishImage (invisible)	polished / groud / honed	✓	✓	$\checkmark\checkmark$	0	✓
colour-enhancing·····creates a silky sheen······creates a wet-look finishO·····waterbased / solvent-free·······breathable / permits water vapour diffusion·· <td< td=""><td>Product characteristics:</td><td></td><td></td><td></td><td></td><td></td></td<>	Product characteristics:					
creates a silky sheen \checkmark $ -$ creates a silky sheen \bigcirc \bigcirc $ -$ waterbased / solvent-free \checkmark \checkmark \checkmark \checkmark \checkmark breathable / permits water vapour diffusion \checkmark \checkmark \checkmark \checkmark \checkmark water-repellent / hydrophobic \checkmark \checkmark \checkmark \checkmark \checkmark dirt-repellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark oil-repellent / oleophobic \checkmark \checkmark	matt (invisible) finish	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Creates a wet-look finishO \checkmark $ -$ waterbased / solvent-free \checkmark \checkmark \checkmark \checkmark \checkmark breathable / permits water vapour diffusion \checkmark \checkmark \checkmark \checkmark \checkmark breathable / permits water vapour diffusion \checkmark \checkmark \checkmark \checkmark \checkmark water-repellent / hydrophobic \checkmark \checkmark \checkmark \checkmark \checkmark dirt-repellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark oil-repellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark UV-resistant \checkmark \checkmark \checkmark \checkmark \checkmark applicable on dry surfaces \checkmark \checkmark \checkmark \checkmark \checkmark applicable on moist surfaces \checkmark \checkmark \checkmark \checkmark \checkmark efflorescence \checkmark \checkmark \checkmark \checkmark \checkmark freeze / thaw damage \checkmark \checkmark \checkmark \checkmark \checkmark general solling \checkmark \checkmark \checkmark \checkmark \checkmark growth of moss and algae \checkmark \checkmark \checkmark \checkmark \checkmark	colour-enhancing	\checkmark	$\checkmark\checkmark$	-	-	-
waterbased / solvent-free \checkmark \checkmark \checkmark \checkmark \checkmark breathable / permits water vapour diffusion \checkmark \checkmark \checkmark \checkmark \bigcirc water-repellent / hydrophobic \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark dirt-repellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark oil-repellent / oleophobic \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark tested an approved as safe for contact with food \checkmark not tested \checkmark \checkmark \checkmark UV-resistant \checkmark \checkmark \checkmark \checkmark \checkmark \checkmark applicable on dry surfaces \checkmark \checkmark \checkmark \checkmark \checkmark applicable on moist surfaces \checkmark \checkmark \checkmark \checkmark \checkmark fforescence \checkmark \checkmark \checkmark \checkmark \checkmark fforescence \checkmark \checkmark \checkmark \checkmark \checkmark stains \checkmark \checkmark \checkmark \checkmark \checkmark general solling \checkmark \checkmark \checkmark \checkmark \checkmark growth of moss and algae \checkmark \checkmark \checkmark \checkmark \checkmark weathering, fading of colours \checkmark \checkmark \checkmark \checkmark \checkmark	creates a silky sheen	\checkmark	-	-	-	-
breathable / permits water vapour diffusionImage: construction of the constructio	creates a wet-look finish	0	\checkmark	-	-	-
An explanationImage of the second	waterbased / solvent-free	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
dirk-repellentImage: Contract with foodImage: Contract with foodI	breathable / permits water vapour diffusion	✓	×	×	✓	
oil-repellent / oleophobicImage of the second o	water-repellent / hydrophobic	$\checkmark\checkmark$	×	$\checkmark\checkmark$	✓	$\checkmark\checkmark$
the particularInterpretationInterpretationInterpretationInterpretationtested an approved as safe for contact with foodImage with foodI					✓	
UV-resistantImage: constraint of the second of			✓		-	
applicable on dry surfacesImage: Constraint of the surfacesImage: Constraint of the surfacesImage: Constraint of the surfacesImage: Constraint of the surfacesProtects against:efflorescenceImage: Constraint of the surfacesImage: Constraint of the surfacesfreeze- / thaw damageImage: Constraint of the surfacesStainsImage: Constraint of the surfacesStainsImage: Constraint of the surfacesgeneral soilingImage: Constraint of the surfacesgrowth of moss and algaeImage: Constraint of the surfacesImage: Constraint of the surfaces<						
applicable on moist surfacesImage: Constraint of the constr						
Protects against:efflorescenceIIIIfreeze- / thaw damageIIIIstainsIIIIIgeneral soilingIIIIIgrowth of moss and algaeIIIIIIIIIIIIweathering, fading of coloursIIIII						✓
efflorescenceImage<	applicable on moist surfaces	\checkmark	\checkmark	\checkmark	\checkmark	-
freeze- / thaw damageImageImageImagefreeze- / thaw damageImageImageImageImagestainsImageImageImageImageImagegeneral soilingImageImageImageImageImagegrowth of moss and algaeImageImageImageImageImageweathering, fading of coloursImageImag	Protects against:					
stainsImageImageImagestainsImageImageImageImagegeneral soilingImageImageImageImagegrowth of moss and algaeImag	efflorescence	✓	✓	\checkmark	\checkmark	-
general soilingImage: Constraint of the solution of t	freeze- / thaw damage	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
growth of moss and algaeImage: Comparison of the second comparison of t	stains	$\checkmark\checkmark$	\checkmark	\checkmark	0	$\checkmark\checkmark$
weathering, fading of colours V V V V	general soiling	✓	×	×	✓	\checkmark
	growth of moss and algae	✓	✓	✓	✓	✓
	weathering, fading of colours	✓	✓	✓	✓	✓
graffiti O 0	graffiti	-	-	0	-	$\checkmark\checkmark$

Symbol explanation:

✓applicable/suitable

O partially applicable/suitable

- not applicable/suitable