

# HYDROMIX-Fluid 50

Special additive for efflorescence-free  
and water-repellent concrete surfaces

## Advantages:

The very fine active ingredients of **HYDROMIX-Fluid 50** create a so-called integral water-repellency across the complete matrix of the concrete.

General information about additives can be found in our brochure „Additives and Fibres“.

## Benefits:

- major reduction resp. prevention of primary and secondary efflorescence
- long-lasting effect because the product is added into the mixture
- effective even in porous concretes
- dirt pick-up on the surface is strongly reduced and cleaning of the surface is simplified.
- better workability of the concrete mixture
- higher resistance to environmental influences, e.g. higher freeze-thaw-resistance
- not a hazardous product according to the hazardous materials regulations and not dangerous goods according to ADR

## Mode of action:

**HYDROMIX-Fluid 50** contains powdery, water repellent active agents, which spread over the surface of solids, especially on the cement particles. The size of the active particles (between 1 - 2  $\mu$ ) is approx. 10-20 times smaller than the size of the cement particles (20 - 40  $\mu$ ). These cement particles are covered by **HYDROMIX-Fluid 50** and thus an effect throughout the complete cross-section of the concrete is achieved. Here the adhesive capacity between water and solids is changed and the capillary water absorption is reduced. **HYDROMIX-Fluid 50** reduces the capillary diameter without restricting the breathability. This leads to a reduced transport of free lime particles within the concrete and to a water repellent effect against infiltrating water, resp. its surface tension — both are essential factors for the development of  $\text{CaCO}_3$  on the concrete surface.

## Application:

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.

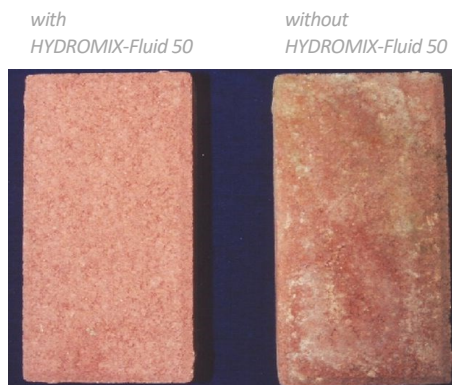
## Dosage:

The dosage rate depends on the type and quantity of cement and aggregates used in the concrete mix design, as well as on the vibration and has to be determined in pilot tests. Experience shows that good results can be achieved within a dosage range from 0.2 – 1.0 % of the cement content.

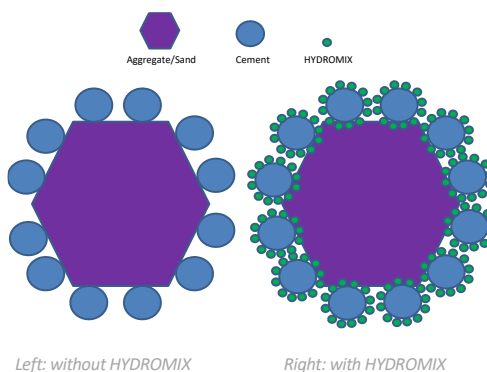
**HYDROMIX-Fluid 50** is added to the wet mixture (do not add to the dry mix!). **HYDROMIX-Fluid 50** can be processed by an automatic admixture dosage system and can, for this purpose, be pre-mixed with the mixing water.

Normally the use of **HYDROMIX-Fluid 50** has no influence on the consistency/slump of the concrete. If necessary, we recommend to reduce the quantity of mixing water by the dosage rate of

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



Comparison of two red coloured concrete paving stones from the same production series after being stored outside for 6 months.



## Product description:

**HYDROMIX-Fluid 50** is a water based emulsion with special active ingredients for the production of concrete surfaces with a reduced capillary water absorption as a basis for the prevention of primary and secondary efflorescence. **HYDROMIX-Fluid 50** has been especially developed for the application in concrete products, e.g. for blocks, paving stones, tiles/slabs, GRC etc. but can also be used for any other cementitious materials.

## Dosage:

Depending on concrete mix design and other parameters.

Recommended dosage rate:

Start with 0.2 – 1,0 % per 1 kg cement and adjust according to performance.

## Packaging:

100—950 liter barrel/container

## Storage:

Store inside a suitable warehouse (not outdoors).

Protect against freezing Can be stored for approx. 12 months in closed original containers.

**Enquiry**

## 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](http://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.

### **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