

# Centrament Air 220

Advanced-generation air entraining agents



## PRODUCT PROPERTIES

- Special balanced in combination with admixtures based on Polycarboxylatether
- Entraining of air micro-pores
- Renders concrete more elastic, easier to compact and improves workability
- Free of corrosion promoting components
- Effectuating a homogenous mixing of the concrete and reduces its tendency to de-mix and bleed

## AREAS OF APPLICATION

- Ready mixed
- Precast elements
- Concrete with a high resistance against frost and deicing salts

## APPLICATION ADVICE

Centrament Air 220 is an air-entraining admixture, based on an efficient combination of active ingredients. It is suitable for use with conventional superplasticizer and plasticizer, but especially with new-generation superplasticizers (polycarboxylat-ether-based).

Centrament Air 220 entrains very finely distributed air micro-pores (< 0,3 mm) into the concrete.

Typical areas of application are the construction of concrete road surfaces, bridge curbs, sluices, parking lots or runways. (Exposure categories XF 2 - XF 4)

Concrete made with Centrament Air 220 contains a multitude of micro-pores. These air-pores are finely distributed within the cement stone of the concrete and are interspersed with and interrupt the capillary pore system. This ensures that freezing water has enough space to expand.

Centrament Air 220 is added during mixing or to the concrete mixture together with the added water.

The pore content of the concrete depends on the concrete composition, the temperature of the fresh concrete and of the surroundings, the consistency (water content), the type of cement as well as the powder-grain content, type and duration of mixing as well as on transportation times.

Wet-mixing should last at least 45 seconds to ensure the air-entraining agent is fully activated.

For ready mixed concrete, the air-pore content of the fresh concrete should be calculated to ensure that the required pore-content is given at the time of on-site inspection (allow a safety margin). To this end, it is necessary to undertake a suitability test under the same conditions as are found at the construction site at the time of concreting.

Relevant regulations must be observed.

If several admixtures are used simultaneously, adequate testing must be performed beforehand.

Centrament Air 220 is also available as a concentrate.

Please note the "General Information on the Use of Concrete Admixtures".

**Centrament Air 220 Konz. is to be stored at above +5 °C at all times.**

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	kg/dm <sup>3</sup>	approx. 1.01	± 0.02 kg/dm <sup>3</sup>
Recommended dosage range	g	2 - 15	per kg cement
Chloride content (maximum)	%	< 0.1	mass fraction
Alkaline content (maximum)	%	< 1.5	mass fraction

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

Self-monitoring	EN ISO 9001
Type of admixture	air-entraining agent per EN 934-2: T5
Designation of admixture	Centrament Air 220
Colour	clear
Form	liquid
Notified body	Karlsruher Institut für Technologie (KIT) Materialprüfungs- & Forschungsanstalt, MPA Karlsruhe, Notified Body number: 0754
In-company production control	EN ISO 9001, EN 934-2/6
Colour code of label	blue
Delivery form	200 kg drums 1,000 kg container
Storage	Can be stored in original sealed packages at temperatures between 5°C and 30°C in dry conditions for at least 12 months.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : BZM10

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300018369]