

PANTAPOR® 2044 (LP)

Item No 0244

Air entraining agent acc. to EN 934-2 for concrete with high frost and freeze-thaw resistance in road construction

FIELDS OF APPLICATION

PANTAPOR® 2044 (LP) is a highly concentrated air entraining agent for producing concrete with excellent frost and freeze-thaw salt resistances and has specially been developed for concrete being used in the construction of traffic areas such as highways and airports.

The air entraining agent is particularly suitable for the construction of concrete safety barriers (Jersey Barrier) and for concrete with stiff or very stiff consistencies.

PANTAPOR® 2044 (LP) optimises the workability and reduces concrete's bleeding and segregation tendencies.

DOSAGE

Recommended dosage range 0.01 – 0.80 mass-% of the cement content; is equivalent to 0.1 – 8 ml per kg cement.

1.0 ml per kg cement can entrain 4.5 – 5.5 vol.-% of air pores.

WORKING PRINCIPLE

PANTAPOR® 2044 (LP) generates a stable micro air pore systems in concrete. The spherical micropores interrupt the suction of the capillary system in concrete and reduce the penetration of water significantly.

Additionally, the micropores allow freezing water to expand within them without exerting pressure to the pore wall. This property prevents concrete largely from spalling, optimises the frost and freeze-thaw salt resistance and enhances the durability of concrete.

TECHNICAL DATA

Homogeneity	homogenous
Colour	brown
State	liquid
Density	1.02 ± 0.02 g/cm ³
pH-Value	11.5 ± 1.0
Chloride content	< 0.10 mass-%
Alkali content (Na ₂ O-equivalent)	< 1.0 mass-%
Workability	from +1 °C
Shelf life	approx. 1 Year
Storage	Store in unopened, original sealed packaging between +5°C and +25°C. Protect from frost and insolation

PROCESSING INDICATIONS

PANTAPOR® 2044 (LP) is either added to the tempering water or to the ready mixed concrete.

The mixing time must comply with the regulations defined in EN 206-1.

Achieving the required content of air entrainment depends on many factors, e.g. the mix design, consistency, transport conditions and many other variables. Therefore the air void content must be controlled permanently.

In case of very stiff concrete an increased dosage of PANTAPOR® 2044 (LP) might be necessary.

Efficacy tests for adding suitable PANTARHIT® - high performance superplasticizers, superplasticizers and plasticizers are available upon request.

This product is classified as hazardous according to the CLP regulations. See safety data sheet for further information.

PACKAGING

- 30 l can
- 200 l barrel
- 1000 l container
- loose by bulk supply

REMARKS

This information describes the application- and processing possibilities of a product and its operation principles under regular conditions. Having no influence on the further application and processing, especially in conjunction with other construction materials, the given indication are neither a warranty in respect of the product's properties or its fitness for a particular purpose nor a full instruction of use. This information, any other recommendation or verbal advice are not binding and do not infer to any liability or legal demand.

Due to continuous further development, the most recent Technical Data Sheet is valid and will be supplied on request. All orders are accepted subject to our current general terms and conditions.

Edition: 18 August 2021

SUITABILITY- AND PRE-TESTS ARE NECESSARY BEFORE APPLYING THE CONCRETE ADMIXTURE!