

# POROCINITEL (AIR ENTRAINING AGENT)

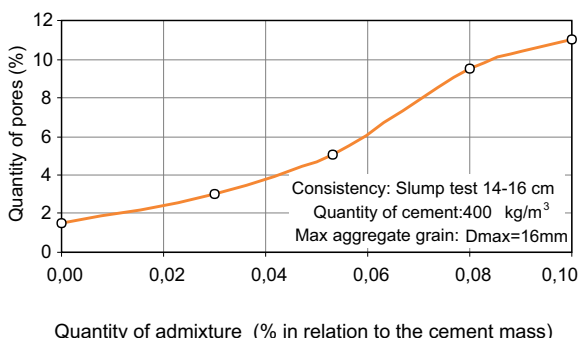
*Admixture for generation of air pores in concretes and cement mortars  
In compliance with: EN 934-2 (Table 5); ASTM C260; BS 5075 part 2*

## Field of application:

Preparation of concretes required to possess high class of resistance to frost and for concretes which should be resistant to frost and de-icing salts, airfield runways, parking lots, dams, concrete pavements, kerbs, drain channels, retaining walls, columns and masonry fences for bridge structures etc;  
It is used as additional agent (admixture) in preparing lightweight concretes;  
Concretes where segregation should be avoided due to the specific way of placement (tunnels, retaining walls etc);  
Preparation of cement mortars for the construction of facades;

## Properties:

- Enables entraining of micropores in concrete and mortar mixtures;
- Enables regular (uniform) arrangement of isolated (unconnected) micropores in concrete and mortar mixtures;
- Spacing among pores amounts to 150-200 (microns);
- Increases the resistance of concrete against frost and de-icing salts;
- Improves the workability of concretes and mortars;
- Facilitates avoidance of segregation and bleeding of water in concretes;
- Increases fluidity of cement mixtures, thus becoming more workable;
- Does not contain chlorides;



## Technical features:

Type:	Solution of synthetic resins
Appearance:	yellowish liquid
Dry substance:	5,0±0,5%
Specific gravity:	1,02 g/cm <sup>3</sup> at 20°C
Chlorides content:	none
Alkali content:	none
pH-value:	9,0±1,0 at 20°C

## Dosing:

Dosing is 0,03 to 0,10% in relation to the cement mass. The quantity of entrained air (pores) depends on a number of factors: dosing percentage, maximum aggregate grain in the concrete mixture (mortar), type and quantity of cement, consistency of fresh concrete (mortar) etc. Prior to its use, it is necessary to carry out preliminary tests of concrete mixtures in order to determine dosing percentage of the air entraining agent for the required percentage of entrained air. Approximately, the dependence of the percentage of entrained air on the quantity of admixture added to concrete mixtures, could be seen in the enclosed diagram, which refers only to the given concrete composition.  
The addition of admixture could be performed either manually or by means of an automated batch meter. The best would be to add it to the water intended for preparation of the concrete (mortar).  
Mixing time duration for the fresh concrete mixture should be two times longer in relation to the mixtures without admixture.

## Effect due to overdosing:

In case of overdosing, it is possible to come to excessive quantity of entrained air in which case strength characteristics of the concrete would be reduced to a large extent. The required quantity of pores must be determined experimentally with preliminary tests.

## Compatibility:

The air entraining agent is compatible with a number of admixtures of ADING's portfolio of products. If the concrete mixture uses two or more admixtures, it is necessary to perform preliminary tests. Different admixtures are batched separately i.e. are not intermixed with each other prior to insertion into the concrete mixture.

The air entraining agent is usable with all types of Portland cements, sulphate resistant cements, cements with replacement materials (fly ash), microsilica.

## Packing:

plastic cans: 5, 10 and 20 kg.  
drums: 200 kg.

## Storage:

In original packing, at a temperature from 5°C to 35°C and protected against direct influence of sunbeams. Shelf life: 12 months.

### Health hazard:

The air entraining agent (Porocinitel) does not contain toxic substances; nevertheless, it is necessary to take care not to come to contact with skin, eyes or not to be swallowed.

In case of splashing on the skin or in the eyes, it is necessary to rinse with pure flowing water. If it has been swallowed, it is necessary to ask for medical assistance.

### Fire:

The air entraining agent is non-flammable liquid.

### Cleaning and discarding:

Cleaning of the residues of Porocinitel (Air entraining agent) is by using water. The old and used packing should be discarded in accordance with the local relevant regulations for that kind of waste.