BUILDING TRUST

PRODUCT DATA SHEET

SikaControl®-333 AER

Air entraining admixture for concrete

DESCRIPTION

Sika air entraining admixtures have been designed and formulated to deliberately form evenly sized and uniformly distributed micro bubbles.

USES

The use of Sika air entraining admixtures significantly improves the workability and durability of concrete. The cohesion is also increased, thus reducing the risk of segregation, and bleed water movement is reduced. It is recommended that the use of air entraining admixtures be considered for concrete in applications such as:

- Most forms of low to medium strength concrete
- Dams, reservoirs
- Airport runways, hardstands
- Roading, pavements, footpaths, driveways
- Slabs and walls

CHARACTERISTICS / ADVANTAGES

- Air entrainment considerably reduces the effect of freeze / thaw cycles caused by frost
- Improved durability of concrete exposed to tidal movements
- Improves the workability and reduces bleeding of mixes with harsh sands and aggregates - advantage of increased workability can be taken to reduce mixing water without reducing handling properties
- Easier and quicker mixing of concrete in agitator trucks
- Concrete in transit and placement is more cohesive and will segregate less
- Concrete becomes easier to place, resulting in less vibration and work effort to achieve proper compaction

PRODUCT INFORMATION

Chemical Base	Water soluble liquid based on a synthetic chemical blend.
Packaging	200 litre non returnable drums, and bulk delivery.
Shelf Life	Twelve (12) months when stored as stated.
Storage Conditions	Store SikaControl®-333 AER in unopened, original containers free from frost and at temperatures between +5°C and +35°C.
Appearance / Colour	Brown liquid
Specific gravity	~ 1.0
Total Chloride Ion Content	<0.1%
Concreting Guidance	▪ **Freezing Point:** -5°C ▪ **Suitability:** All types of Portland cement, including sulphate resistant cements
Effect on Setting	None

Recommended Dosage	Typical dosage: 100 - 300 ml/m³ of concrete. Exact dosage rates are determined by air meter tests on trial mixes.
Dispensing	SikaControl®-333 AER is added directly into the mixing water prior to addition to the aggregates. Do not add to the dry cement or aggregates. Regular tests on the entrained air content should be undertaken with an air meter. If necessary the dosage may need to be adjusted to keep the entrained air content within the required limits.
Compatibility	SikaControl®-333 AER is compatibile with other Sika admixtures - after consultation with Sika NZ. Always add separately, do not premix.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

USES

Increased air contents generally have a detrimental effect on the strengths of concrete. Limits for air content in air-entrained concrete are given in NZ3104. Dosage rates given are indicative only. Exact dosages are determined by air meter tests on trial mixes.

Factors affecting air entrainment include:
- Type and fineness of cement
- Concrete with a medium to high cement content
- Type of sands and aggregates used
- Grading and proportion of sand
- Cement content
- Total free water content
- Temperature
- Other admixtures

LIMITATIONS

As with all concrete and mortars, it is essential to protect mixes containing SikaControl®-333 AER from water evaporation during the crucial early age curing period. We recommend the use of Antisol® curing membranes for this purpose. Refer to Antisol® data sheet for further information. When used in conjunction with set accelerators the air entraining dosage may need to be increased - please contact Sika (NZ) Ltd.

ECOLOGY HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

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