

# PRODUCT DATA SHEET

## Sika® AIR Mix

### AIR ENTRAINING ADMIXTURE FOR CONCRETE

#### DESCRIPTION

Sika® AIR Mix has been designed and formulated to deliberately introduce air into concrete in the form of evenly sized and uniformly distributed micro bubbles.

#### USES

The use of Sika® AIR Mix 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
- Most forms of structural concrete.

#### CHARACTERISTICS / ADVANTAGES

Sika® AIR Mix provides the following beneficial effects to concrete:

- 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.
- Can be used to reduce mixing water without reducing workability and 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.

#### APPROVALS / STANDARDS

Sika Air Mix meets and exceeds all requirements of Australian Standard 1478.1-2000 for Air Entraining Admixture (AEA).

#### PRODUCT INFORMATION

<b>Chemical Base</b>	Water soluble liquid based on a synthetic chemical blend
<b>Packaging</b>	20 litres, 200 litres and bulk delivery
<b>Shelf Life</b>	Twelve (12) months from date of manufacture when stored as stated.
<b>Storage Conditions</b>	Store in unopened, original containers free from frost at temperatures between +5°C and +35°C.
<b>Appearance / Colour</b>	Light brown liquid
<b>Specific gravity</b>	~ 1.01 kg/litre
<b>Total Chloride Ion Content</b>	Nil

#### APPLICATION INFORMATION

<b>Recommended Dosage</b>	Typical dosage: 30 - 150 ml/m <sup>3</sup> of concrete (exact dosage rates are determined by air meter tests on trial mixes)
<b>Dispensing</b>	<ul style="list-style-type: none"> <li>▪ Sika® AIR Mix is added directly into the mixing water prior to addition of the aggregates. Do not add to the dry cement or aggregates.</li> <li>▪ 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.</li> </ul>
<b>Compatibility</b>	(With other Sika admixtures) Yes - after consultation with Sika Technical Dept.

## 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.

## LIMITATIONS

- Excessive air content (which may result from over-dosing) generally has a detrimental effect on the strengths of concrete. Limits for air content in air-entrained concrete are given in NZS 3104.
- Dosage rates given are indicative only. Exact dosages are determined by air meter tests on trial mixes.
- Factors affecting air entrainment include:
  1. Type and fineness of cement
  2. Cement content
  3. Type of sands and aggregates used
  4. Grading and proportion of sand
  5. Total free water content
  6. Temperature
  7. Other admixtures
- As with all concrete and mortars, it is essential to protect mixes containing Sika® AIR Mix from water evaporation during the crucial early age curing period. We recommend the use of Sika® Antisol curing membranes for this purpose. Refer to the Sika® Antisol data sheet for further information.
- When used in conjunction with set accelerators the air entraining dosage may need to be increased. Please contact the Sika (NZ) Ltd Technical Department.

## 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

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, sub-

strates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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