BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sika® Air Mix L/S

Air entraining admixture for concrete

DESCRIPTION

Sika® Air Mix L/S 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 L/S 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

APPROVALS / CERTIFICATES

Sika® Air Mix L/S meets and exceeds all requirements of Australian Standard 1478.1-2000 for Air-entraining Admixture (AEA).

FEATURES

Sika Air Mix LS 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.

PRODUCT INFORMATION

Product identifier	Sika® Air Mix L/S
Place of manufacture	Aotearoa New Zealand
Composition	Water soluble liquid based on a synthetic chemical blend
Packaging	200 litres and bulk delivery
Shelf life	Twelve (12) months from date of manufacture if stored correctly as stated.
Storage conditions	Store in original containers free from frost and between +5°C and +35°C.
Appearance and colour	Light brown liquid
Specific gravity	~ 1.0 kg/litre
Total chloride ion content	Nil.

TECHNICAL INFORMATION

Specific advice	**Freezing Point:** -5°C

Effect on setting	None.

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/
	Email address	info@nz.sika.com
	NZBN	9429000018791

BUILDING CODE INFORMATION

Building Code clauses	Note: This product on its own is not within the scope of the NZ Building Code. It is an additive / admixture for use in the manufacture of concrete, to enhance its performance properties in either its plastic or hardened state. When added to concrete that must comply with the NZ Building Code, and it used in accordance with Sika's technical literature, it will contribute to meeting the requirements of the following clauses: B1 Structure: Performance Clauses B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q) B1.3.4 B2 Durability: Performance clause B2.3.1-(a) not less than 50 years F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B1.3.1, B1.3.2, B1.3.3 (a, b, f, h, m, q), B1.3.4: This product meets the requirements of AS1478.1 Chemical Admixtures for Concrete, Mortar and Grout. When added to concrete during the production phase it contributes to the hardened concrete meeting loading requirements arising from self-weight, imposed gravity loads, earthquake, wind impact, and the effects of creep and shrinkage over time. Performance B2.3.1 (a) 50 years: This product meets the requirements of AS1478.1 Chemical Admixtures for Concrete, Mortar and Grout. When added to concrete, mortar or grout during the manufacturing process it helps the hardened concrete to achieve its durability requirements and to remain serviceable for 50 years, or more. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2004. Performance F2.3.1: This product meets this requirement when used and applied in accordance with Sika's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Sika Product Technical Data sheet and product Safety Data Sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

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

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.

IMPORTANT CONSIDERATIONS

- Excessive air content (which may result from overdosing) 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 type and fineness of cement, cement content, type of sands and aggregates used, grading and proportion of sand, total free water content, temperature, and other admixtures.

- As with all concrete and mortars, it is essential to protect mixes containing Sika® Air Mix L/S 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 Sika.

APPLICATION INFORMATION

DESIGN REQUIREMENTS

Design requirements for concrete that contains Sika admixtures, or other concrete additives are the responsibility of the ready mixed concrete producer and/or the concrete design engineer.

Recommended dosage	Typical dosage: 50 - 250 mls/m^3 of concrete. Exact dosage rates are determined by air meter tests on trial mixes.
Compatibility	■ Sika® Air Mix L/S is compatible with all types of Portland cement, including sulphate resistant cements. ■ Sika® Air Mix L/S is also compatible with other Sika admixtures - after consultation with the Sika Technical Dept. Note: Never pre-mix Sika® Air Mix L/S with other Sika admixtures, always add separately.
Dispensing	■ Sika® Air Mix L/S is added directly into the mixing water prior to addition of 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.

MAINTENANCE REQUIREMENTS

Once added the Sika admixture / additive becomes an integral part of the hardened concrete, mortar or grout. Refer to the supplier of that product for their maintenance instructions.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

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, substrates 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.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

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