BASF
The Chemical Company

MICRO-AIR® 120

Water reducing plasticiser with moderate air entraining properties

Description
Integral concrete plasticiser and water reducing agent with moderate air entraining properties.

Primary uses
- To entrained air.
- To increase workability.
- To reduce bleeding in concrete and improve cohesive properties.
- To increase durability.

Typical applications
- In areas of congested reinforcement where high workability is of benefit.
- In roads, runways, parking aprons, to increase durability.
- In concrete brick and block manufacture.
- In mass pours to increase workability.

Advantages
- MICRO-AIR® 120 enables air entrainment of concrete mixes. Its plasticising action will give an increase in workability thus facilitating a reduction in the water content of up to 10-15%; subject to mix design.
- Concrete will be less susceptible to bleeding and segregation, especially where being poured or pumped, and will have increased durability and reduced permeability.
- Of particular benefit in crushed aggregate mixes, where the improved cohesion of the mix results in minimising sand runs and reducing bleeding.
- After the initial set, the concrete will attain a higher early strength showing an increase over control strength at both early and ultimate ages.

Packaging
MICRO-AIR® 120 is available in bulk.

Action
MICRO-AIR® 120 combines a powerful plasticiser, which disperses and deflocculates cement particles within a concrete mix. It can be used to improve workability or allow reductions in the free water content of the concrete mix. The powerful air entraining agent in MICRO-AIR® 120 entrains controlled amounts of air of optimum spacing and bubble diameter to give improved durability under freeze / thaw conditions.

Composition
A liquid admixture based upon refined lignosulphonates and air entraining agents.

*Typical properties

Colour:	Dark brown liquid
Specific gravity:	1.185 at 25°C
Air entrainment:	3-6% increase in air content. Trial mix needed to assess dosage rate for desired air content.
Chloride content:	Nil to BS 5075
Nitrate content:	Nil
Freezing point:	0°C. Can be reconstituted if stirred after thawing.

Standards
EN 934-2 Table 2
ASTM C-494: Types A & D, ASTM C260
BS 5075 Part 1 (superseded by EN 934-2)

BASF
The Chemical Company

MICRO-AIR® 120

Directions for use

MICRO-AIR® 120 should be added to the concrete mix during the mixing cycle at the same time as the water or the aggregates. Never add MICRO-AIR® 120 to the dry cement. No extension to normal mixing time is necessary.

Dosage

As with most admixtures, field trials should be conducted to determine the optimum addition rates of MICRO-AIR® 120. These trials will be helpful in assessing the correct dosage for desired conditions, such as high early strength and correct degree of air. As a guide to these trials a dosage range of 240-560ml per 100kg of cement is recommended as a starting point, although dosages may vary considerably depending on sands and aggregates used.

Compatibility

MICRO-AIR® 120 can be used with all types of Portland cement including Sulphate Resisting. For use with other special cements, contact BASF Middle East Technical Services Department.

MICRO-AIR® 120 should not be pre-mixed with other admixtures. If other admixtures are to be used they must be dispensed separately.

Dispensing

MICRO-AIR® 120 should be dispensed through a proprietary dispenser such as is available from BASF. Details available on request.

Specification

MICRO-AIR® 120

Where indicated use MICRO-AIR® 120, a high performance water reducing, plasticising and air entraining concrete admixture manufactured by BASF or similar approved manufactured to the following specification:

Specific gravity at 20°C (sheen cup):	1.171 - 1.181 at 25°C
Complying to specification type:	ASTM C494 Types A & D BS 5075 Part 1
Composition:	High molecular weight refined lignosulphonates and air entraining agents.

MICRO-AIR® 120 is to be used in all concrete (indicate) at a dosage range of 240ml to 560ml per 100kg of cement strictly in accordance with the manufacturer's instructions.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is up to 2 years when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consults BASF's Technical Services Department.

Safety precautions

MICRO-AIR® 120 is not a fire or health hazard. Spillages should be washed down immediately with cold water. For further information see Product Health and Safety Advice Sheet.

Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

The Chemical Company

MICRO-AIR® 120

BASF reserves the right to have the true cause of any difficulty determined by accepted test methods.

Quality and care

All products originating from BASF's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

02/95 BASF_CC-UAE revised 04/2008

* Properties listed are based on laboratory controlled tests.

BASF Construction Chemicals UAE LLC
P.O. Box 37127, Dubai, UAE
Tel: +971 4 8090800 Fax: +971 4 8851002
www.basf-cc.ae e-mail: marketingcc.mideast@basf.com

Certificate No. 963680
Certificate No. 945787
Certificate No. 772556