



## Concrete Air Entraining and Plasticising Agent for Precast Concrete

ADOAIR PL is a chemical blend to impart deliberate and controlled entrainment of air in concrete in the form of disconnected, uniformly dispersed microscopic air bubbles and water reducing chemicals to aid the plasticising properties,

ADOAIR PL helps improve the surface detail and surface wearing properties and help improve cast detail or corners and helps reduce breakages on concrete block formation. The micro bubbles help produce frost resistant concrete and impart resistance to passage of water through hardened concrete

### Advantages

- Increases workability with lower water/cement ratio.
- Increases workability of dry no-slump concrete.
- Increase resistance to passage of water through

hardened concrete.

- Increase strength in suitably designed mixes.
- Increases resistance to aggressive soil chemicals.
- · Improves cast detail on arises and corners.

- Reduces breakages on concrete block production.
- Increases yield with lower costs.
- Produces frost resistant concrete.
- Improves surface finish and surface wearing properties.
- Reduces segregation and bleeding.
- Reduces placing and compaction time.

## **Application**

#### Roads, Runways and Paving:

To obtain low water/cement ratio consistent with good placing and compaction properties. To reduce segregation and bleeding thus improving wearing properties and durability. To produce concrete resistant to the effects of freeze-thaw cycles. To speed placing and compaction. ADOAIR PL complies with the requirements of D.o.T. Specification for Highway Work Clause 1001.

#### Mass Concrete Structures:

To ease the placing of lean and under-sanded mixes and to reduce the excessive bleeding associated with these types of mixes. To provide improved water retention for curing throughout the mass.

#### Pneumatically Placed Concrete:

To ease the placing of lean harsh mixes. To prevent segregation a double dosage is recommended for this type of application, the excess air resulting from this will be expended during passage through the pipeline.

#### Concrete Block Making:

To ease de-moulding and reduce the number of breakages, and to improve surface texture and cast detail to arises on the casting.

There are numerous other applications where the inclusion of ADOAIR PL will produce concrete with all the benefits mentioned above.

#### Use

ADOAIR PL is added to the gauging water or pre-wetted mix at a rate of 50-150ml per 50Kg of Portland cement. It is suitable for use with all types of Portland cement.

The optimum quantity to add will depend upon such factors as mix proportions, grading and shape of the aggregates, water/cement ratio and the temperature. Trials should be carried out to ensure the production of concrete with the desired characteristics. Concretes incorporating ADOAIR PL have better moulding properties and in some instances this may give the appearance of an over sanded mix. An adjustment in the fine aggregate proportions of the mix can be made which will show further reductions in water content.

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## Storage

Store in cool temperature, but above freezing, and stir just prior to use. In the event of freezing, material should be completely thawed and then thoroughly mixed before use.

## Shelf Life

Practically unlimited in sealed containers.

## **Specification**

ADOAIR PL is manufactured by Adomast Manufacturing Ltd and shall be used strictly in accordance with the manufacturer's instructions. For specific advice regarding any aspect of this product, please consult our Technical Department

# Health and Safety

ADOAIR PL is a liquid admixture of a non toxic nature .however prolonged contact should be avoided. Splashes should be washed with water, if eye contact should occur immediately flush with clean water and if irritation persists seek medical advice.

See Safety Data Sheet for further information.

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