

Cicomix[®] Air

Air Entraining Agent

DESCRIPTION

Cicomix[®] Air is a high quality liquid admixture, designed to entrain air inside the concrete. Cicomix[®] Air improves workability to a large extent by adding more air microbubbles to concrete. By using Cicomix[®] Air, frost resistance in concrete is an essential benefit. Cicomix[®] Air is suitable for both cold and tropical climates.

USES

- Freezing areas concrete like cold stores and large freezers.
- In bulk concrete pouring such as highways, airports, bridges, and water structure projects.
- Extreme cold and ice exposed concrete.
- Some lightweight concrete applications.

ADVANTAGES

- Moreover, adding MIXO[®] Air helps to imprison water. Therefore, it limits segregation and reduces, even prevents, bleeding.
- Avoids compatibility problems between cement/sand/admixtures.
- Compatible with all types of Portland cement, class C and F fly ash, slag, micro silica, calcium chloride, and fibers.
- Chloride free, safe to be used in contact with the reinforcement.
- Compatible with all types of superplasticizers.
- In fresh concrete, MIXO[®] Air has a plasticizing and water reduction effect at constant workability. The air bubbles act as fine particles, and augment the workability of the concrete.
- The air bubbles network created reduces capillarity phenomenon.

STANDARDS COMPLIANCE

ASTM C260 and BS EN 934 Part 2.

PACKAGING

210 liter drums or 1000 liter flow bins. Tanker loads are also available on request.

SHELF LIFE & STORAGE

12 months storage life if stored in its original unopened containers under a dry and shaded place in a temperature from 2°C to 50°C.

TECHNICAL PROPERTIES

Appearance	Yellow liquid
Density @ 20°C	1.03±0.02 Kg/Ltr
pH @ 20°C	10 ± 1
Chloride content	Nil

PERFORMANCE GUIDELINES

The table below shows a comparison of 4 concrete lab trials using the same design mix, but with different doses of water and Cicomix[®] Air:

Concrete Mix Design (Per/m ³)				
OPC	350 kg			
5/20 gravel	1140 kg			
0/5 sand	780 kg			
Mixes	M1	M2	M3	M4
Dosage Lit/100kg OPC	0.00	0.07	0.10	0.15
Water Lit/m ³	175	160	155	150
Slump (mm)@the same time	60	70	70	80
Air content %	2	4	5	6
Compressive strength N/mm ²				
1 day	9.0	8.5	8.5	8.0
7 days	29.0	34.0	33.0	32.0
28 days	34.0	38.0	37.0	35.0

APPLICATION INSTRUCTIONS

Dispensing

The premeasured quantity of Cicomix® Air should be added to concrete components using a recommended dispenser. It should be added to the concrete with the mixing water to obtain the best results.

Dosage

Lab trials should be made in prior to determine the right dosage of each concrete mix. The safe dosing range of Cicomix® Air is 0.07–0.8 liters per 100 kg of cement, including any cement replacement material. A 0.15% dosage of the product to the weight of cement is commonly used.

Overdosing

Exceeding the recommended dosage will result in a significant decrease in the mechanical strength of the concrete. Monitoring the air content will help prevent overdosing. Meanwhile, exceeding the maximum dosage will not affect the setting time of the concrete. Please ask for CIC technical advice if an overdose is required.

Curing

Fresh concrete should be cured by water immediately after the final setting time, especially at high temperatures. In the absence of water, use one of our Cicocure® products.

CLEANING & DISPOSAL

Spillages of Cicomix® Air should be washed out with water or absorbed into fine sand and disposed off in accordance with local authorities' regulations.

PRECAUTIONS

Health And Safety

Cicomix® Air is non-hazardous. It should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When contact with the skin, wash off immediately with soap and water. If swallowed, seek medical attention immediately, do not induce vomiting.

TECHNICAL SUPPORT

CIC provides on-site assistance, as well as consulting services on projects when requested. Technical data sheets on other CIC products and guidance on their use are available on request.



Warranty

CIC products are guaranteed against defective materials and manufacture and sold subject to CIC's standard terms and conditions of sale. Whilst CIC endeavors to ensure that any advice, information or recommendation given is correct, the company cannot accept any liability either directly or indirectly arising from the use of its products. User of the product must test the product's suitability for the intended application and purpose, since the company has no control over the application of its products. Information contained in this document is given on the best current knowledge. Our Products are in continuous development and CIC reserves the right to change the product without prior notice.

Jeddah Head Office

Jeddah tower building -
SHARFIYA - PO BOX
7232 JEDDAH 21462
+9666532152
info@cictg.com

Central Region

Khurais road-Al Rabwa
Near Gulf Bridge Riyadh
+966 11-4937635
+96611-4939213

Eastern Region

Alkhuzayem 2/7446 King
Abdulaziz Rd Madinat Al
Umal-AlKhobar 34441
4759

Jeddah Factory

Modon Phase 3, Jizan
Road, Jeddah, Saudi
Arabia

Jubail Factory

2882 Road 118- 1St
Industrial Area Unit
No 69