

InsuBuild 144

High range, water reducing superplasticiser for producing free flowing concretes and promoting high early and ultimate strengths.

DESCRIPTION OF PRODUCT

InsuBuild 144 is formulated from synthetic polymers specially designed to grant free flowing qualities to concrete.

A free flowing concrete is a fluid concrete with a slump of at least 200mm, easily flowing, but at the same time free from segregation and having the same w/c ratio as that of a low slump concrete (25mm) without admixture. InsuBuild 144 is chloride free.

ADVANTAGES

InsuBuild 144 considerably improves the properties of fresh and hardened concrete.

PRIMARY USES

- Microsilica concrete.
- Mass concrete pours.
- Readymixed concrete.
- Longdistance transpor.
- Pumpedconcrete.
- Casting in hot climates.

TO OBTAIN

- Reduced thermal peaks.
- High workability for longer periods.
- Lower pumping pressure.
- Delayed setting with longer workability.
- Higher ultimate strengths.
- Reduced permeability.
- Improved durability.

COMPATIBILITY

InsuBuild 144 is compatible with all cements and most air-entraining agents meeting the ASTM standards.

The addition of InsuBuild 144 and InsuAir 111 (air-entraining agent) to concrete is recommended where it is required to withstand freezing and thawing cycles.

PACKAGING

InsuBuild 144 is available in 1000 ltr bulk

TYPICAL PROPERTIES

Colour:	Dark brown liquid
Specific gravity:	(1.2 ± 0.01) at 25° C
Chloride content:	Nil to BS 5075
Nitrate content:	Nil
pH:	5-7
Freezing point:	0°C;
Flashpoint:	N/A

STANDARDS

ASTM C- 494 Type B,D and G
BS 5075 Part 1 and 3

DOSAGE

Optimum dosage of InsuBuild 144 should be determined in trial mixes. As a guide, the following dosages are recommended as a starting point for any trial in normal concrete, a dosage of between 0.8% and 2% of cement weight. In high performance microsilica concrete, a dosage of between 1.5 and 3% of cement weight. Dependent upon mix requirement, it is possible to use a higher dosage of InsuBuild 144 without causing any adverse effects upon the concrete.

Please consult Insumat Technical Services Department for further information.

DISPENSING

InsuBuild 144 is a ready-to-use liquid, which is dispensed into the concrete together with mixing water.

The plasticising effect, or water reduction, is higher if the admixture is added to the concrete after 50-70% of the mixing water has been added. The addition of InsuBuild 144 to dry aggregate or cement is not recommended. Automatic dispensers are available in your local market.

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WORKABILITY

InsuBuild 144 ensures that free flowing concrete remains workable in excess of 3 hours at +20°C. Workability loss is dependent on temperature, on the type of cement, the nature of aggregates, the method of transport and initial workability. It is strongly recommended that concrete should be properly cured particularly in hot and dry climates.

STORAGE

InsuBuild 144 must be stored where temperatures do not drop below +5°C. If product has frozen, thaw and agitate until completely reconstituted. Store under cover, out of direct sunlight and protect from extremes of temperature.

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

SHELF LIFE

Up to 24 months if stored according to manufacturer's instructions in unopened containers.

SAFETY PRECAUTIONS

InsuBuild 144 is not a fire or health hazard. Spillages should be washed down immediately with cold water.

For further information, refer to the material safety data sheet.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information, contact Insumat's representative.

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

QUALITY STATEMENT

All products manufactured by Insumat Egypt, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, standard.

* Properties listed are based on laboratory controlled tests.

Actual measured data may vary due to circumstances beyond Insumat's control.

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