

Cemairin 280

Air-entraining admixture



Description

Cemairin 280 is an air-entraining admixture for concrete, formulated from selective polymers to create highly stable microscopic air bubbles which distribute uniformly in the concrete mix.

This effect can be used to improve the resistance of concrete mixes against freezing and thawing, severe weathering and de-icing compounds.

Applications

Cemairin 280 is suitable for use in the following applications:

- ▲ In areas where there is a potential for frost damage such as roadways, airport aprons and runways.
- ▲ Can be used with conventional ready mix concrete as well as concrete mixes which include micro-silica, fly ash as well as GGBS.

Advantages

- ▲ Improves the durability of concrete against frost and severe weathering conditions.
- ▲ Significantly improves the cohesion of concrete mixes.
- ▲ Improves workability.
- ▲ Chloride-free.

Standards

Cemairin 280 complies with ASTM C260 standard.

Compatibility

Cemairin 280 is suitable to use with all types of cement and cement replacement materials. Cemairin 280 is compatible with most of DCP's admixtures used in the same concrete mix as long as they are added separately to the concrete mix.

For more details, please contact DCP's Technical Department

Technical Properties @ 77°F (25)°C:

| | |
|-------------------|-------------------|
| Colour: | Dark brown yellow |
| Specific gravity: | 1.03 ± 0.02 |
| pH: | 9.5 - 11.5 |
| Chloride content: | Chloride-free |

Method of Use

Cemairin 280 should be added to the concrete with the mixing water to achieve optimum performance.

An automatic dispenser should be used to dispense the correct quantity of Cemairin 280 to the concrete mix.

Dosage

The recommended dosage of Cemairin 280 to achieve air content in the range of 3 - 7% is 0.15 to 2.3 fl oz/100 lb (10 - 150 ml/100 kg) of cement or cementitious materials in the mix including GGBFS, PFA or micro-silica.

Representative trials should first be conducted to determine the optimum dosage of Cemairin 280 to meet the performance requirements by using the materials and conditions in actual use.

Points to be considered affecting air entrainment

Any variation in the following factors can cause change in the air content:

- Cement fineness.
- Concrete temperature.
- Sand grading.
- Mixture types.
- Compaction method.
- Carbon or organic impurities

Cemairin 280

Effects of Over Dosage

Overdosage of Cemairin 280 will cause the following:

- ▲ Significant increase in air content which may cause a slight reduction in the compressive strength.
- ▲ Slight increase in setting time.

Cleaning

Clean Cemairin 280 with fresh cold water.

Packaging

Cemairin 280 is available in 275 gal (1,041 litre) and 330 gal (1,249 litre) IBC totes. Bulk supply in tanker trucks is also available upon request.

Storage

Cemairin 280 has a shelf life of 12 months from date of manufacture if stored at temperatures between 35°F and 122°F (2°C and 50°C).

If these conditions are exceeded, contact DCP Technical Department for advice.

Cautions

Health and Safety

Cemairin 280 is not classified as a hazardous material. Cemairin 280 should not come into contact with skin and eyes.

In case of contact with eyes, immediately flush with plenty of water and seek medical attention.

For further information, refer to the Material Safety Data sheet.

Fire

Cemairin 280 is nonflammable.

More from Don Construction Products

A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Don Construction Products Inc.
2826 Lineberger Industrial Dr.
Lancaster, SC 2970
USA

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

