

# CIKOgrout CON

Smart Chemical Solutions



## Non-shrink cementitious grout admixture

### Description

CIKOgrout CON is an admixture for non-shrink, cementitious grout used for filling gaps between similar or dissimilar substrates. CIKOgrout CON is suitable for anchoring pre-cast columns, anchor bolts and fencing posts.

CIKOgrout CON is a premium quality powder admixture when mixed with cement and filler/aggregates, results in a free-flow, high strength non-shrink grout.

### Properties

- Single component system requiring addition of cement and filler/aggregates at site.
- Controlled expansion in plastic and in early hardened stage.
- High early and final strength.
- Low permeability.
- Chloride free and will not rust or harm metal on contact.
- Frost and salt resistant.

### Application area

- Anchoring.
- Post tensioned cables.
- Bridge bearing.
- Duct grouting and general void filling.
- Potable water equipment.
- Concrete structure.
- Pre-cast concrete parts.
- Rails grouting.

### Physical properties

|              |                       |
|--------------|-----------------------|
| Form         | Powder                |
| Colour       | Light Grey (standard) |
| Flowability  | 100% flow             |
| Expansion    | +0.2% [28days]        |
| Setting time | Initial 3 hrs 30 min  |
| ASTM C 191   | Final 5 hrs 15 min    |

### Dosage

For neat cement grouts and for 1:1 cement:sand grout, use 500 gm of CIKOgrout CON per 50kg of cement.

### Typical mixes

| OPC Kg | Wash Sand kg | Water lts | CIKOgrout CON gm | Density [Fresh] kg/m <sup>3</sup> | Compressive Strength N/mm <sup>2</sup> 28 days; N/mm <sup>2</sup> |
|--------|--------------|-----------|------------------|-----------------------------------|---|
| 50     | ---          | 15-16     | 500              | 2140                              | ≥35   |
| 50     | 50           | 19-20     | 500              | 2290                              | ≥30   |

### Application instructions

#### Surface preparation

Clean the concrete surface to remove loose and unsound material by means of water blasting or any other means to reach sound concrete surface.

#### Formwork

Water tight formwork is made around the grouting area to required height. If used for base plate grouting, it is recommended to restrict width of the shoulders around base plate to maximum 50mm from the face of the base plate to avoid generation of expansion cracks under un-restrained conditions.

#### Soaking

Prior to grouting, fill water inside the formwork and soak the concrete surface for approximately 6 hours. Just before grouting, remove water completely from the formwork, anchor bolt pockets etc. by mechanical means or using sponge so that the surface should be free from standing water.

#### Mixing

Add water to the mixing vessel followed by Portland cement, CIKOgrout CON and sand [if being used]. Continue mixing for 3 minutes or until achieving uniform dispersion of the mix.

For best results, a heavy duty mixer must be used. Small quantities can be mixed with a slow paddle mixer.

#### Placing

Place the mixed grout from one side or corner of the base plate to avoid air voids. Maintain minimum of 15cm pouring head to achieve maximum flow property of the grout.

### **Curing**

The exposed area of grout shall be cured as per the standard curing practice.

### **Over-dosage**

Marginal overdosing will increase workability and slight volume expansion. Drastic over-dosage will cause increase in expansion, set and strength retardation.

### **Compatibility**

CIKOgrout CON is compatible with all types of Portland cement except high alumina cement.

### **Precaution:**

- Application temperature must be between 5<sup>o</sup> C - 40<sup>o</sup> C.
- Do not re-temper grout after initial mix.

### **Packaging**

CIKOgrout CON is packed in 5kg and 10kg moisture resistant bags, each containing, 10 nos. x 500 gm units  
20 nos. x 500 gm units

### **Shelf life**

CIKOgrout CON has a shelf life of 12 months if stored in accordance with CIKO instructions.

### **Storage**

CIKOgrout CON should be stored under enclosed shaded area in unopened bags.

### **Health & safety**

Use standard dust mask to avoid inhalation of dust. Powder when wet or moist can cause burns to skin and eyes which should be protected during use. If comes in contact with skin/eyes, flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

### **Technical Support**

*For any technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.*

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- Waterproofing and damp proof coatings
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- Flooring and toppings
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- Tile adhesives and grout
- Concrete repair materials
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- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries