



CWC®ROBOHYBRID 104

High Range Water Reducing Concrete Admixture Based PCE Technology

Description

CWC®ROBOHYBRID 104 A specially designed PCE based Superplasticizer to Imparts very high workability, improved workability retention and allows a large reduction in water content.

CWC®ROBOHYBRID 104 combines the properties of high-water reduction and workability retention. It allows the production of high-performance concrete and/or concrete with high workability.

Indicative characteristics

Form	: Light Brown Liquid
Specific Gravity	: 1.13 ± 0.02
Air entrainment	: ≤ 1.5 % over control mix.
pH	: Min. 6.0
Chloride Content	: Nil, as per BS - 5075 (Part-I)

* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer to our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

Standard Compliance

CWC®ROBOHYBRID 104 complies with IS9103:1999, BS 5075 Part 3 and with ASTM C494 Type G admixture depending on dosage used.

Advantages:

- Admixture suitable for pumping different grades of concrete to greater heights.
- Provides higher strength without increase in cement content or reduction in workability.
- Produces a more uniformly cohesive high quality free flowing concrete.
- Improved dispersion properties
- Very high-water reduction more than 35% depending on dosage used.
- Improved durability
- Improved cohesion & rheology properties
- Improved flowability
- Reduced drying shrinkage.
- Improved workability retention

Domains of application

CWC®ROBOHYBRID 104 is a high-performance superplasticizer intended for applications where high-water reduction and long workability retention are required, and it has been developed for use in:

- Especially suitable for concrete mixes with extended workability requirements as well as improved flow characteristics
- High performance concrete
- High strength concrete
- Ready mixed concrete
- Prestressed concrete
- Pumped concrete
- Suitable for a wide range of applications with high or low W/C and /or high or low environment temperatures

Concrete Works Construction Chemicals Private Limited (CIN: U74999PN2021PTC199740)

Corp. Office: Office No. 70, Mahavir Center, Fourth Floor, Sector 17, Vashi, Navi Mumbai 400703.

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APPLICATION INSTRUCTIONS

DISPENSING

CWC®ROBOHYBRID 104 should be added to the mixing water only. Should the product be added to fresh concrete, into the mixing truck, it is necessary to mix at high speed, and then at low speed (with a minimum 3 minutes at each speed)

Dosage: Optimum dosage can only be established after trials, considering the rheological characteristics and the required mechanical performances. Rate of addition is generally in the range of 0.3-1.5% by wt of cementitious material.

For maximum dispersion throughout the mix.

** Higher dosage can be used if agreed & allowed by clients/consultants

LIMITATIONS

Excessive water addition or overdosing may cause bleeding or segregation. If frozen and / or if precipitation has occurred, **CWC®ROBOHYBRID 104** may be used after thawing slowly at room temperature and after intensive mixing.

Compatibility

CWC®ROBOHYBRID 104 is suitable for use with all types of Portland cements, SRC cements and cement replacement materials such as PFA, GGBFS and micro silica.

The use of a combination of admixtures in the same concrete mix and or cement replacements may alter the setting time. Trials should always be conducted to determine such setting times

Packaging

230 Kgs Barrel & bulk in 10 KL tanker

Shelf Life: If stored in unopened containers at normal ambient temperatures, a shelf-life of approximately 12 months.

Freezing point: Approximately -2°C.

Precautions

Not to be stored at high temperatures for long periods. Should be protected from frost. It is Non-toxic and formulated from chemicals which present no fire or health hazards. Spillages should be washed down immediately with water.

Safety

Before use, refer to the Material Safety Data Sheet.

The MSDS is available on www.cwcchemicals.com

Additional information

The CWC range of associated products includes high strength cementitious, epoxy grout, polyester resin-based mortar, Resin anchoring systems. Also available is a range of products for use in construction; viz., admixtures, curing compounds, release agents, flooring systems and repair mortars.

Separate datasheets are available on these products.

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