

SYNCHRO[®] 100 Reducing Additive

Chromium (VI) Reducing Additive

Product Description

SYNCHRO[®] 100 is a patent pending liquid additive that has been formulated around stannous sulphate.

Uses

SYNCHRO[®] 100 is used to reduce the level of soluble chromium(VI) ions present when cement is mixed with water.

Function

Chromium is present as a trace element in the raw materials used in the manufacture of cement clinker. In the oxidizing burning conditions of the cement kiln chromium(VI) may form.

SYNCHRO[®] 100 reduces this hexavalent chromium in aqueous cementitious systems to chromium(III), which forms a stable complex that precipitates.

Addition Rates

SYNCHRO[®] 100 has a linear dose response from 2–20 ppm of chromium(VI). Typical dose for 5 ppm chromium(VI) is between 120 and 200 ppm and for 10 ppm of chromium(VI) is between 200 and 350 ppm. Actual dose will depend on the desired cement shelf-life and on cement grinding and storage conditions. (Figure 1)

Image

[Synchro 100 Figure 1](#)

Image

[Synchro 100 Figure 2](#)

Product Advantages

- Exceptional cement storage stability
- Ease of use
- Liquid Additive
- No staining or retardation
- Compatible with cement additives and concrete admixtures

Compatibility with Other Admixtures

The use of SYNCHRO[®] 100 does not influence the performance of cement, mortar or concrete.

SYNCHRO[®] 100 is compatible with commonly used cement additives and concrete admixtures.

Storage Stability

Chromium(VI) levels of ≤ 2 ppm have been maintained for well over 3 months in cements treated with Synchro[®] 100. Storage stability at different plants depends on milling and storage conditions. (Figure 2)

Dosing Equipment and Storage

See GCP recommended system configuration and materials of construction.

Packaging

SYNCHRO[®] 100 is available in 1 m³ IBC containers weighing approximately 1500 kg.

SYNCHRO[®] 100 may also be supplied to certain locations in bulk.

Health & Safety

All precautions defined on the SDS (Safety Data Sheet) for SYNCHRO[®] 100 must be followed.

Technical Services

Field Engineers from GCP are available to assist in laboratory and mill test evaluations of Synchro[®] 100.

ca.gcpat.com | North America customer service: 1-877-4AD-MIX (1-877-423-6491)

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