

SYNCHRO[®] 100 Reducing Additive Data Sheet

Chromium (VI) Reducing Additive

Product Description

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

Product Advantages

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

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.

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.

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.

gcpat.com | North America Customer Service: +1 (877) 423 6491

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use that would infringe any patent, copyright or other third-party right.

SYNCHRO is a trademark, which may be registered in the United States and/or other countries, of GCP Applied Technologies, Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2018 GCP Applied Technologies, Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 400, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

This document is only current as of the last updated date stated below and is valid only for use in the United States. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.com. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2023-06-28

gcpat.com/solutions/products/gcp-functional-additives/synchro-100-reducing-additive-data-sheet