

**BUILDING TRUST** 

# PRODUCT DATA SHEET SCOFIELD<sup>®</sup> Integral Color SG

An economical blend of synthetic iron oxide pigments for coloring ready-mix concrete or manufactured concrete products

## **PRODUCT DESCRIPTION**

SCOFIELD<sup>®</sup> Integral Color SG is a cost-effective means to permanently color concrete and other cementitious materials. It is packaged in easy to use disintegrating bags that can be used to make standard colors, or mixed to develop hundreds of permanent color variations.

#### USES

SCOFIELD<sup>®</sup> Integral Color SG is ideal for use in ready-mix concrete applications or to color manufactured concrete products such as colored concrete block, brick, paver, or precast structures.

# **CHARACTERISTICS / ADVANTAGES**

SCOFIELD<sup>®</sup> Integral Color SG adds color that is weather resistant, UV stable, lightfast, and alkali resistant. It contains no materials that initiate, accelerate, or promote the corrosion of steel, coated metal, or plastic concrete reinforcements.

It is packaged in easy to use disintegrating bags that can be used to make single standard colors, or mixed together to develop hundreds of color variations.

# **APPROVALS / STANDARDS**

All pigments used conform to the requirements of *ASTM C 979 Pigments for Integrally Colored Concrete.* 

# **PRODUCT INFORMATION**

Chemical Base	Synthetic iron oxide pigments.
Packaging	SCOFIELD <sup>®</sup> Integral Color SG is available in 11 pound disintegrating bags that can be added directly to the concrete mix.
Shelf Life	60 months
Storage Conditions	Keep dry and moisture free.
Appearance / Color	SCOFIELD <sup>®</sup> Integral Color SG is available in 11 prepackaged standard colors as depicted in Scofield's Color Chart A-362 SCOFIELD <sup>®</sup> Integral Color SG. These may be used individually or blended to produce hundreds of colors.
Volatile organic compound (VOC) con- tent	Not applicable

Product Data Sheet SCOFIELD® Integral Color SG November 2021, Version 03.01 021405071000000061

# **TECHNICAL INFORMATION**

Concreting Guidance	SCOFIELD® Integral Color SG is designed to have minimal effect on concrete plastic and hardened properties, and to minimally interact with other concrete admixtures. As all chemical admixture interactions cannot be predicted, always test final mix designs with actual materials to be used, and perform a jobsite test as described later in this bulletin.
APPLICATION INFORMATION	
Recommended Dosage	Color saturation and intensity is determined by the amount of SCOFIELD® Integral Color SG used per 94 pound sack of cement. Numbers shown on the Color chart after the "SG" identifier represent the dosage in pounds per sack of cement to achieve the color shown. SG078-2 indicates that 2 pounds of SCOFIELD® Integral Color SG per sack of cement is required to make that color.

If the mix contains supplementary cementitious materials such as fly ash or blast-furnace slag, their weight must be added to the weight of the cement when determining the correct SCOFIELD<sup>®</sup> Integral Color SG dosage.

# **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

# LIMITATIONS

Do not use with chloride base accelerators.

# ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

# **APPLICATION INSTRUCTIONS**

### **Factors Influencing Final Color & Appearance**

Colors represented on the SCOFIELD® Integral Color SG Color Chart A-362 depict samples of broom finished concrete made with medium gray cement and cured with SCOFIELD<sup>®</sup> Cureseal<sup>™</sup> 700.The final color and appearance obtained on the jobsite will be influenced by concrete composition, surface finishing technique, and curing compound/sealer selection.

Concrete composition variations that can impact color include cement type and color, aggregate selection, and the use of pozzolans such as slag or fly ash. Differences in sealer or curing compound type, such as water or

Product Data Sheet SCOFIELD® Integral Color SG November 2021 Version 03 01 02140507100000061

solvent based, or if no sealer is used, can also influence final appearance.

Finishing techniques will influence final concrete appearance. Different tools such as wood floats, magnesium floats, steel trowels, brooms, and edging tools, will each influence color, surface texture, sealer penetration, and final cured concrete appearance differently. Do not change tool types once work has begun.

Changes in water content and water-to-cement ratio, both in the mix and on the concrete surface during finishing, can influence the final surface color. Mix designs that develop excessive bleed water can float non-uniform cement/SCOFIELD® Integral Color SG ratios, and cause uneven or weak coloring. Once mix designs are established, do not add water to alter concrete plastic properties.

Do not add water to loosen partially cured loads. Do not use "watering" sprinklers as colored concrete cures, or use wet brooms and tools while finishing. Any of these will likely result in inconsistent concrete color.

#### **Placement and Finishing Tips**

As freshly placed concrete cures, its color will vary with differences in surface moisture. Concrete curing in shaded areas or in the center of large slabs will surface dry slower than those exposed to sunlight or closer to form edges. This can cause color variations that will often fade with time.

Avoid high salt aggregates that can cause efflorescence that can make color irregular. These visual differences can be long lasting, and raise questions about the quality of the concrete placement. Use LITHOCHROME® Colorwax<sup>™</sup> tinted to match the final color of the cured concrete and avoid these problems and deliver jobs that are uniform in color and appearance. Always evaluate composition and finishing techniques as described below.



BUILDING TRUST

#### Placements to be Ground and Polished

Use of 1 bottle of SCOFIELD<sup>®</sup> Ready-Mix Truck Defoamer per concrete truckload to minimize bug holes and air voids.

#### **Reinforcing Fiber Interactions.**

If high air content is experienced with reinforcing fibers, pre-wet the fibers by tumbling in the mixer three minutes with water, colorant, and 1 bottle of SCOFIELD® Ready-Mix Truck Defoamer per truckload before batching concrete into the mixer.

#### Jobsite Test Sections

Prior to large scale production, the concrete or cementitious mix design for each color to be produced must be made. Conduct small scale testing to demonstrate concrete from the mix design meets all slump, flow, air content, compressive strength, and any other required concrete specifications. Prior to general jobsite use, representative Jobsite Test Section(s) or "Mock-Ups" must be produced and approved for each individual concrete color mix design, surface finish/texture, and for each curing compound/sealer combination that will be created. Use Jobsite Test Sections to verify entire system suitability including frame/mold and foundation preparation methods, surface concrete specification compliance, finishing techniques, safety procedures, and achieved performance of the fresh and fully cured concrete. When applicable, test completed systems for wet and dry slip resistance. Evaluate polishing or coating application techniques, final color, and visual appearance. Do not proceed with products, techniques, or finishing systems that do not meet required specifications or meet with site owner approval. Selected Jobsite Test Sections should be in close proximity to the larger job area, and made from the same concrete mix design that will be used on the larger project. Test sections should be sized to be representative of the finished project, and be produced by the same workers who will perform the project installation.

# **OTHER RESTRICTIONS**

See Legal Disclaimer.

## LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

#### Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: +1-800-933-7452 Fax: +1-201-933-6225 usa.sika.com



Product Data Sheet SCOFIELD® Integral Color SG November 2021, Version 03.01 021405071000000061

## Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920 Phone: 52 442 2385800 Fax: 52 442 2250537

SCOFIELDIntegralColorSG-en-US-(11-2021)-3-1.pdf

**BUILDING TRUST** 

