

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# SCOFIELD® Formula One Liquid Dye Concentrate

A PENETRATING, TRANSLUCENT DYE CONCENTRATE DESIGNED TO COLOR INTERIOR CONCRETE SURFACES PRIOR TO BEING SEALED, DENSIFIED, OR POLISHED

# PRODUCT DESCRIPTION

SCOFIELD® Formula One Liquid Dye Concentrate is a solvent soluble dye for coloring interior concrete surfaces. Designed for easy job-site dilution with acetone, the diluted material will penetrate into the pores of properly prepared new or old concrete. It can be applied lightly to gently tone surfaces, or applied heavily to develop deep colors. Variations in application technique and topcoat selection can produce color effects that range from rich paint like jewel tones to light variegated natural effects.

SCOFIELD® Formula One Liquid Dye Concentrate is not designed as a stand-alone floor finish. After application it must be locked into the concrete with a premium concrete densifier prior to polishing, or sealed with a protective coating.

# **USES**

Use to color to interior new or old concrete, overlay, or other cementitious surfaces where moisture is not expected. Ideal for floors, walls, ramps, countertops, and other concrete objects that will be polished or coated with clear protective sealers.

# **CHARACTERISTICS / ADVANTAGES**

- Quick dry formula minimizes job delays.
- VOC exempt carrier allows for immediate dilution in acetone or alcohol blend.
- Resistant to color bleed from water based sealers & topcoats.
- Small packaged concentrate for easy storage.

# PRODUCT INFORMATION

Packaging	$8 \ \mbox{fluid}$ ounce plastic bottles (236 ml) to be mixed with 1 gallon (3.8 L) of acetone to make ready-to-use dye.
Appearance / Color	Available in the 22 standard colors shown on Scofield's Color Chart A-432 SCOFIELD® Formula One Liquid Dye Concentrate. Because the dye is translucent, the final color produced is unique to each surface and will be influenced by surface composition. If surfaces are ground, dyes do not color most aggregates and stone as effectively as surrounding mortar. Final color depth will depend upon the type of sealer selected. Colors shown on the chart are results from application to smooth troweled concrete made with gray cement, dry ground to remove surface paste, dyed, densified, polished and sealed with SCOFIELD® Formula One™ Guard-W.

Product Data Sheet SCOFIELD® Formula One Liquid Dye Concentrate October 2018, Version 01.01 020815110020000023 Store in sealed containers 40°F - 120°F (4°C - 49°C).

# **APPLICATION INSTRUCTIONS**

SCOFIELD® Formula One Liquid Dye Concentrate must be diluted with acetone prior to use. Before using, read and understand this entire document and SDS, as well as all product information, warnings, and the SDS for the acetone or any other solvent that will be used to apply the dye. Only use in a well ventilated area, and wear personal protective equipment when handling or using this product. If using spray equipment, always wear protective respirator, and mask adjacent areas to protect property from overspray.

#### **Coverage Rates**

Coverage will vary depending on the porosity and texture of the surface, surface preparation, and application technique. Typical coverage rate is 300–600 ft<sup>2</sup> per diluted gallon (7.0–15 m<sup>2</sup>/L). Additional coats will increase color and opacity.

#### **EQUIPMENT**

All equipment including protective clothing, and masking materials used must be safe for use with acetone. Do not mix with electric drills or use in any area where vapors could contact an ignition source. Wear rubber gloves, goggles, and dust mask if using any kind of spray equipment. Wear an organic vapor respirator if using in any space where vapors may collect.

Dye mixture can be applied using an acetone resistant garden type pump sprayer with a conical tip, soft brushes, sponges, or lamb wool applicators. Avoid stiff bristles that can flick dye onto unwanted areas.

#### **SURFACE PREPARATION**

Concrete should be a minimum of 28 days old, and readily absorb sprayed acetone. Surfaces to be dyed must be dry, free of evaporation or surface retarders, concrete curing compounds, form release, coatings, sealers, oils, waxes, laitance, or any other material that might prevent dye from penetrating the surface. If any of these inhibitors to penetration are present, dry scrub or grind off these materials with rotary equipment. If power washing or wet cleaning is needed, is needed, allow surfaces to complete dry before application of dye.

If preparing to color concrete that will be later polished, grind the concrete to the desired aggregate exposure and profile prior to application of dye.

#### MIXING

Each 8 fluid ounce bottle is designed to be mixed with 124 fluid ounces of acetone to produce 1-gallon of ready to use dye. Mixing can be done in an acetone resistant

pail, sprayer, or in a gallon-size acetone container after removing 8 fluid ounces of acetone. Mix materials by hand stirring with a wooden paint stick, or by shaking closed containers for 2 minutes.

#### **APPLICATION**

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

The final color and appearance will be influenced by the concrete age, composition, technique used to finish the concrete, and application technique. Application to undisturbed slabs will be more paint like. Application to slabs with the top paste layer removed will be grainier. If floors are ground to expose aggregates, mortar areas will likely accept more color than rock surfaces.

#### **Jobsite Test Sections**

Verify and approve suitability and appearance by making jobsite test sections prior to general application. Apply each dye color onto each type and age of concrete or topping surface, and use each sealer technique that is to be used. Test sections must be of adequate size to be representative and be produced by the same workers who will apply product to the larger job. Test completed systems for wet and dry slip resistance to ensure they are safe. Do not proceed with products, techniques, or finishing systems that do not meet required safety specifications or site owner approval.

#### Dye Application

Mask all areas not to be dyed to safeguard against splashes, overspray, and runoff from application. Only work in a well ventilated area. Wear all required safety equipment. Do not work around any possible ignition sources. Take care not to allow tape adhesive to interfere with surfaces to be dyed.

The following 8 steps have proven successful for floors in a wide range of conditions.

- **1. Grind or open the surface to the desired level of aggregate exposure.** This may require rotary equipment. Finish with 400 grit abrasive disks or pads.
- 2. Remove dust by vacuum.
- 3. Mix dye and acetone as directed.
- **4.** Apply the SCOFIELD® Formula One Liquid Dye Concentrate mixture. This can be done with an acetone resistant low pressure garden sprayer, mop, or brush. Apply in a circular motion to just saturate the surface. Second coat or complementary colors can be used at this time.
- **5. Allow surfaces to dry.** This will take 30 minutes depending on weather conditions.
- **6. Remove surplus dye.** Use rotary equipment with stiff bristle brushes or fine honing 800 grit abrasives to remove excess dye and expose desired aggregate surfaces. Remove any dusts with vacuum.
- 7. Lock in dye with densifier or sealers/topcoats. Fol-



low application instructions for these products. If using solvent based products, apply 1st coat with spray equipment to avoid lap lines and roller marks.

8. Proceed to polishing if desired.

**For Vertical Applications:** Apply by acetone resistant garden sprayer consistently from the bottom up or the top down. Brush out drips immediately. Allow to dry at least 2 hours before application of sealer systems or vertical polishing.

#### **CLEANING OF TOOLS**

Clean tools and equipment with acetone.

# **AVAILABILITY/WARRANTY**

#### **Availability**

SCOFIELD® Formula One Liquid Dye Concentrate is marketed internationally through strategically located dealers, and representatives. Scofield offers a complete line of engineered systems for coloring, texturing, and improving performance in architectural concrete. Scofield Systems address specialized requirements for interior, exterior and vertical uses with compatible systems of complementary products including coloring admixtures, color hardeners, colored cementitious toppings, stains, curing compounds, sealers, coatings, repair products and texturing tools. Visit the Scofield website at www.scofield.com for further information.

# **LIMITATIONS**

SCOFIELD® Formula One Liquid Dye Concentrate is for interior use only. Exposure to sunlight can cause color change or fading. Do not use on damp concrete, concrete slabs on damp ground, or concrete that will be exposed to moisture. Moisture can cause Liquid Dye to discolor or move within the slab and cause color variation. If moisture is a concern, ensure the concrete is dry by testing to ensure that the Moisture Vapor Emission Rate (MVER) is below 5 lbs./1000sq.ft per 24 hours.

# **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.

# **LOCAL RESTRICTIONS**

See Legal Disclaimer.

# **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.

VOC = 0 g/I

# **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 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 AP-PLY INCLUDING ANY WARRANTY OF MERCHANTABIL-ITY 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 OTH-ERS. 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 201-933-8300.



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