BUILDING TRUST

PRODUCT DATA SHEET

SikaColor-100 P

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

PRODUCT DESCRIPTION

SikaColor®-100 P is a pre-measured admixture for integrally coloring ready mixed concrete during batching. Superior quality control during manufacturing and packaging help to ensure your jobs will have uniform color from load-to-load. Previously named Uni-Mix® Integral Concrete Colorant and CHROMIX® P Admixtures for Color-Conditioned® Concrete.

USES

- Concrete flat work installations
- Vertical concrete installations
- Interior concrete floors and exterior concrete hardscapes
- Precast, tilt-up, shotcrete, overlays, and cast-in-place applications
- Municipal pavements
- Exposed aggregate
- Stamped concrete

CHARACTERISTICS / ADVANTAGES

- Pre-measured repulpable bags
- 1 bag per cubic yard
- Blend of UV resistant synthetic iron oxides
- Uniform color load-to-load
- Expanded color offering
- Custom colors available-minimum quantity requirement

APPROVALS / STANDARDS

- ASTM C979/C979M-16 - Standard Specification for Pigments for Integrally Colored Concrete

PRODUCT INFORMATION

Chemical Base	Synthetic Iron Oxide
Packaging	Small repulpable paper bag (weight varies) Medium repulpable paper bag (weight varies) Large repulpable paper bag (weight varies) SikaColor®-100 P is packaged for 5 sacks or 6 sacks of cement per cubic yard.
Shelf Life	60 months
Storage Conditions	Store in original, unopened containers, in dry storage
Appearance / Color	Available in 24 standard colors

TECHNICAL INFORMATION

Concrete Mix Design

Concrete is recommended to have a minimum of 5 sacks of cement per cubic yard of concrete. Exterior concrete requiring freeze-thaw resistance is recommended to have a minimum of 6 sacks of cement per cubic yard of concrete. If cement substitutes such as fly ash or blast furnace slag are utilized, that mix should be used for all adjacent pours as it will affect color. All cementitious material should be considered part of the cement content for dosage rate purposes. Concrete must be free of reactive aggregates and poured at the appropriate slump pertaining to the job. The water/cement ratio needs to be consistent throughout the entire project. In hot weather, the use of a retarder or hydration stabilizers should be considered. During cold weather, when an accelerator is needed, choose a non-chloride accelerator. Do not use calcium chloride. SikaColor®-100 P is compatible with most chemical admixtures and fibers. All concrete subject to freeze-thaw cycles should be properly air entrained (typically 5-7%) as prescribed by the mix design.

SikaColor®-100 P is always consistent. Other variables can affect the appearance of concrete. Therefore, it is important that you discuss your project with your Ready Mix supplier. The same cement, sand, and aggregates must be utilized throughout the project. Any deviations will affect the final color. Contact Sika with any questions concerning admixtures and mix design.

APPLICATION INFORMATION

Recommended Dosage

Add one bag for each cubic yard (meter) of concrete. Do not open bags. Simply toss the repulpable bag into the mixer. This eliminates the mess and inaccuracy associated with the handling of loose colorants. The use of single dose bags simplifies inventory management.

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

- To avoid discoloration do not store objects on colored concrete for at least seven days after placement.

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

Cast a job site mock-up prior to the installation for approval of color and finish. Utilize all materials, tools, and techniques from the actual job in the mock-up. Consistent batching, pouring, finishing, curing, sealing, and preparation techniques, will ensure the uniformity of architectural concrete. Verify adequate wet and dry slip resistance. Maintenance requirements should also be discussed.

BATCHING

The mixer drum should be in good condition with little or no buildup on fins. One quarter (1/4) of the mixer volume is the minimum amount of concrete that should be batched to develop a consistent mix.

- When introducing color at the Ready Mix plant, first introduce the bags into the mixer, then batch the concrete.
- When introducing color on the job site into a pre-mixed Ready Mix truck, spin the drum in reverse until the concrete load backs up to the top.

Add the bags of SikaColor®-100 P to the drum. Once added, ensure that any colorant retained on the fins is thoroughly mixed into the load by slowly reversing the drum so that the concrete contacts and removes colorant from the fins. Rotate the drum at optimal mixing speed as recommended by the mixer manufacturer for a minimum of 100 revolutions.

When using a pea gravel or round stone mix, it is recommended to pour the color out of the bag and into the drum, as the rounded aggregate will not properly break up the bag. A minimum of 100 revolutions is recommended when working with a pea gravel mix design.

INSTALLING COLORED CONCRETE FLATWORK

Subgrade

The subgrade should be leveled and properly compacted to ensure a uniform thickness of concrete during placing and finishing. The subgrade must be free of frost with no standing water. Prior to placing concrete in hot conditions, dampen the sub-base uniformly with water without pooling.

Placing and Finishing

Once placing has begun, do not randomly add water to the mixer drum or to the surface of the colored concrete. This will create color variations and a strength loss. Water may be added to the drum before initial discharge to attain, but not to exceed, the specified slump. Once discharged, the specified slump must be maintained throughout the installation, particularly for adjacent pours of concrete. Never retemper concrete that has started to set. Water reducing and plasticizing admixtures may be used with SikaColor®-100 P. Use of such admixtures may affect the finishing characteristics of the concrete. The use of SikaCem®-190 Concrete Control should be considered in hot or adverse conditions.

After placing and initial bull floating, no further finishing should be performed until the bleed water has dissipated, after which final finishing can take place. Closing with a steel trowel can diminish the effectiveness of air entrainment at the surface and should be avoided where freeze-thaw is a concern. Texture all exterior surfaces adequately and uniformly for slip resistance. For exterior installations, apply a broom finish or swirl finish using a float. When broom finishing concrete, shake off any water that may be left on the broom after rinsing, as it may cause discoloration. Finishing techniques must be consistent. Differing finishing techniques will change the appearance of the color.

Control Joints

Random cracking of a concrete slab is minimized by the timely and correct placement of control joints. Control joints may be introduced during concrete placement with a groover, or after the concrete has reached initial set by power sawing. Each method should be evaluated prior to installation and should be incorporated into the pre-job mock-up. Refer to following American Concrete Institute publications for additional information: Guide to Concrete Floor and Slab Construction (ACI 302.1R-15), Joints in Concrete Construction (ACI 224.3-95).

INSTALLING VERTICAL COLORED CONCRETE

Unless a specific form liner has been specified, use a clean epoxy coated or urethane coated plywood form. Use non-leaking snap-tie cones. Clean and then tape or seal all joints to prevent leakage. Any bleed water leaking along joints may discolor the wall. Choose a release agent that does not discolor concrete. Do not use metal form ties or chairs within 1.5 in. (38.1 mm) from the surface.

Keep the slump consistent from load-to-load. Do not add water after a portion of the load has been discharged. Never retemper concrete that has started to set. Cast all walls in a continuous pour to their full height between engineered horizontal joints. When possible, use both external and internal vibrators. Vibrate the concrete in lifts up to 2 ft. (60.96 cm) or less. Do not touch the interior face of the form with the vibrator. Perform vibration long enough to consolidate concrete and dislodge entrapped air. Do not over vibrate the concrete, as this can cause segregation of the mix.

Strip all forms when the concrete is the same age. Lightly sandblast all surfaces sufficiently to remove form marks and form release residue.

Note: Excessive sandblasting may expose sand and aggregates, substantially changing the color of the finished wall.

CURING AND SEALING

Never use plastic sheeting or water spray to cure colored concrete, as it will mottle and streak the surface. Use liquid, membrane-forming compounds. Use SikaCem®-100 Clear Guard®, SikaCem®-100 PRO 350®, or SikaCem® water-based sealers for exterior applications. Use SikaCem® water-based sealers for interior applications. Consult most current local Product Data Sheets for complete SikaCem® sealer Application Instructions.

MAINTENANCE

Consult most current local Product Data Sheets for complete SikaCem® sealer Maintenance Instructions.

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.

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