# **SUREPOUR**™ PRODUCT DATA SHEET



## **DESCRIPTION**

SureCrete's concrete colors used in *SurePour™* formulation are pure, synthetic, iron oxide pigments containing no fillers that will affect the performance of the concrete mix design. SureCrete's concrete colors applications provide the user with a lightfast, weather resistant, lime-proof, no maintenance finished product. We maintain the highest tinting strength and color consistency from bag to bag. The color is conveniently packaged in a repulpable sack that disperses rapidly into the batch.

**SurePour** contains only finely milled synthetic iron oxides, the strongest and most stable colors available. These colors are lime-proof, sun fast, inert, and meet or exceed the criteria of ASTM C979.

Our custom formulated colors can cover the entire spectrum upon your request. Each color match is handled on an individual basis. In cases where exact color matching is required, samples of your field raw materials may be required for sample preparation.

SureCrete's *SurePour* bags are available in specially designed packages for your on-site use. Because of the inherent tinting strength of synthetic iron oxides, standard loadings do not exceed 4%. Levels greater than 5% will not enhance the finished color.

## CONCRETE MIX DESIGN

Below are some general practices for adding color to freshly poured concrete:

- Any type of Portland Cement may be used in colored concrete, however, due to cement's inherent properties; it is necessary to follow approved mixing practices.
- Cement for the entire job/project should be the same type and brand and from the same mill and plant.
- · All aggregate, fine or coarse, should be supplied from one source and be non-reactive.
- The mix design should remain constant. If the cement content varies, the pigment content must be adjusted to maintain the weight ratio of pigment to cement.
- The concrete consistency as denoted by the slump test should not exceed 5". A
  3 4" slump is recommended. Use the lowest slump compatible with a workable and placeable mix.
- · Always rinse the mixer drum thoroughly before batching colored concrete.
- The pigment amount to be added must be determined by weight. Never estimate by visual bag splitting.

# **QUICK FACTS**

## **PACKAGING**

Standardized "1 yard" bag (weight varies based on color).

### COVERAGE

1 bag covers between ½ yard and 2 yards of freshly poured concrete depending on your color preference. See color chat for formulas.

## COLOR

6 Standard colors make 18 different

variations each in a light, medium and dark version:

Chocolate, Caramel Buff, Chestnut, Gun Metal, Red Barn and Watermelon.

### SHELF LIFE

Under normal conditions: when kept dry and moisture free, out of direct sunlight, the shelf life of an unopened bag is (12) months from the date of purchase. Storage must be under roof and off the floor. Rotate inventory to maintain product that is within limits.



- Add color by weight directly into the mixer along with the aggregate cement and water.
- The transit mixer should operate at charging or mixing speed (50 - 100 revolutions) for 5 - 10 minutes while adding color.

## ADDITIONAL ADMIXTURES

SurePour colors for integrally colored concrete contain no additives, allowing the concrete designer complete flexibility.

SureCrete recommends using the admixtures that the ready mix company stocks and has a proven experience record with their materials. The desired admixtures should be added separately at the batch plant.

- · Air-entraining admixtures are acceptable.
- · Calcium Chloride is never recommended.
- · Water reducing admixtures are acceptable.
- The concrete consistency as denoted by the slump test should not exceed 5". A 3 - 4" slump is recommended. Use the lowest slump compatible with a workable and placeable mix.
- Always rinse the mixer drum thoroughly before batching colored concrete.
- The pigment amount to be added must be determined by weight. Never estimate by visual bag splitting.
- Add color by weight directly into the mixer along with the aggregate cement and water.
- The transit mixer should operate at charging or mixing speed (50 - 100 revolutions) for 5 - 10 minutes while adding color.

## MIXING & APPLICATION

#### Sub-Grade

A successful concrete slab starts with a well-drained sub grade that can uniformly sustain the weight of the slab as well as the load imposed on the slab. The sub grade should be uniformly graded compacted and thoroughly dampened. There should not be any soft or muddy spots, or freestanding water on the sub grade.

#### **Placing**

Integral colored concrete does not require special procedures for placing and finishing, however greater care and good concreting practices must be followed.

All colored concrete should be placed at the same slump, using the lowest slump consistent with a workable and placeable mix. A 3"-4" slump is recommended, 5" maximum. Once a portion of the batch has been placed, no water should be added to the remaining batch. Concrete should always be placed in the forms as near the final location as possible. Movement should be minimal, as it encourages segregation. Be sure to cover all nearby slabs and structures to avoid spatters from the new colored concrete.

#### **Finishing**

For color uniformity, finishing should be done carefully. Do not over trowel, as this will cause dark spots from trowel burning. Finishing must not begin until bleed water has left the surface to avoid serious scaling, dusting, crazing, efflorescence, or uneven coloring. No dusting of cement or sprinkling of fogging water should be used when finishing colored concrete. A broom, rotary, or textured finish is recommended.

#### Placement of Vertical Concrete

Planning is crucial in placement of vertical and poured-in-place concrete. Consider type of cement, detailing of formwork, mixing and placing techniques, slump control, and temperature of cure. It is recommended that a field mock-up panel be prepared. Include all materials, reinforcing steel as in the finished product.

#### Design Criteria for Colored Concrete

The following points should be considered in designing colored concrete. The concrete temperature should be between 65 and 85 degrees. Timing of the arrival of concrete trucks is crucial so that there is no excessive mixing. Avoid using porous forming materials. Conveying methods must be consistent with ACT-304- 73. The concrete should be deposited in the level lifts 12-18" thick. The distance between intersections should generally be about 18" depending on the concrete mix and vibrator used. Tilt-up concrete panels should be textured using sandblasting and surface retarders to expose coarse aggregate.

#### **Patching Colored Concrete**

Do repair work within two days to minimize color variation. The same materials and methods should be used. A 50/50 mix of white/gray cement can be used to compensate for the darker patch area. The same color loading should be used on all repairs.

#### For Central Mix or Pre-Mixed Batch Plants

Add 1/2 (one-half) of the total batch into a clean ready mixed truck drum. Do not use slurry water or reclaimed aggregates. Add the correct number of disintegrating bags into the drum and mix at high speed for at least 3 minutes. Batch the remaining concrete into the truck and mix again for at least 3 minutes before final slump adjustment. At the job site, re-mix the load for at least 3 minutes to insure concrete consistency. Do not exceed maximum allowable revolutions.

#### Additional Considerations for Consistent Color

Color loads should never be smaller than 3 cubic yards. Add reinforcement fibers after the color load has been thoroughly mixed. This reduces the potential for fiber color balling.

Use one source for cement, aggregate and pozzolans throughout out

the job. Monitor and control incoming material consistency. Do not use calcium chloride-based admixtures.

Wash out all drums before loading. Keep slumps consistent. Minimize driver-added water. A 3 to 5 inch slump is recommended. Maintain the same water/cement ratio. Required higher slumps should be achieved by using water reducing of plasticizing admixtures and NOT by adding water because this will adversely affect the color.

## SUITABILITY SAMPLE

Because job site conditions and requirements can vary significantly, always prepare a sample. This is especially critical for custom coloration.

## DISPOSAL

Contact your local government household hazardous waste coordinator for information on disposal of unused product.

## LIMITATIONS

For use by trained professionals that have read the complete SDS.

## WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/seller's option. SureCrete LLC shall not be liable for cost of labor or direct and/or incidental consequential damages.

## CAUTIONS

KEEP OUT OF REACH OF CHILDREN. Inhalation: Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. Skin Contact: Skin contact may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. Eyes: Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

## SAFETY DATA SHEETS

The following are links to all available safety data sheets related to this product:

SurePour Safety Data Sheet (SDS)

## MANUFACTURER PART #'S

Chocolate SKU# 35103008-07 **Caramel Buff** SKU# 35103008-73 Chestnut SKU# 35103008-74 SKU# 35103008-81 **Gun Metal** Red Barn SKU# 35103008-85 Watermelon SKU# 35103008-91 Special Order 1% Load SKU# 35103031-00 SKU# 35103032-00 Special Order 2% Load Special Order 4% Load SKU# 35103034-00

## VOC REGULATORY COMPLIANCE

