

B01 LIQUID-GEL PIGMENT FOR INTEGRAL COLOR OF MORTAR AND CONCRETE TECHNICAL BULLETIN

GENERAL DESCRIPTION

Construcolor® B01 pigment is a water-based liquid-gel formulated from the highest quality pigments, designed to disperse evenly throughout any concrete or mortar mix, prepackaged in 1 and 5 gallons and 1 gallon pails.

PRODUCT DESCRIPTION

Construcolor® B01 liquid-gel pigment is a thixotropic gel, free of solvents and environment friendly, specially formulated for integral coloring of concrete and mortar. Construcolor® B01 is produced under rigorous plant standards, the pigment used to create our Liquid Gels comply with ASTM 979 – Pigments for integrally colored concrete.

USES

Construcolor® B01 Liquid-Gel pigment can be used for cast-in place concrete, pre-cast and tilt-up concrete panels, retaining walls, concrete blocks, bricks and pavers or any other use where a cementitious mixture requires integral coloring. Construcolor® B01 also can be used to color mortar grout joints, for the installation of floor or wall ceramic tiles, bricks and masonry.

COMPOSITION AND MATERIALS

Construcolor® B01 is formulated with the highest quality pigments red, yellow and black synthetic iron oxides, green chrome oxide and carbon black (concrete grade) pigments or a combination of those. The B01 pigment is highly resistant to sunlight and UV radiation, alkali and weather conditions, keeping the integrity of its color for a longer period of time. In addition, when Construcolor® B01 has been used, it has proven to have no adverse effects on the desired structural characteristics of the concrete or mortar where it has been applied.

LIMITATIONS

When using Construcolor® B01 liquid-gel pigment, it is recommended that the use of Calcium Chloride be avoided, as it may cause discoloration of the concrete or mortar.

PREPARATION OF CONCRETE

Construcolor® B01 is easy to use and can be added at any time to the water added to the concrete mix or directly into the concrete mixture during the mixing process. The dosage of B01 pigments are calculated in relation to the percentage of cementitious in the concrete mixture, making it possible to be added accordingly to weight or volume, either manually or through automatic dispensing equipment. The B01 pigments are available in 11 standard colors with different pigment dosage rates that can be combined to obtain a wider variety of colors and tones. Custom colors are available upon request.

For uniform batch-to-batch color, the concrete mix design should be consistent. Timing and placement of the concrete, forming and finishing techniques, release agents, curing methods, color of cement and aggregates, and water content may contribute to slight variations in the finished color. The addition of lime will tend to lighten the color. In general, it is recommended to add between 2% and 10% of B01 pigment in proportion to the weight of cementitious in the concrete or mortar.

Construcolor® B01 will not compromise the integrity of any additives commonly used in the production of concrete and mortar, with the exception of Calcium Chloride. It is advised that a spot test should be performed before using it with an additive the first time.

When using Construcolor® B01 in concrete mixtures that contain an additive, as a precaution it is not recommended to add them at the same time. It is preferable to add the pigment first, as you obtain the desired color in the mixture, proceed to add the additive.

CONCRETE PLACEMENT

The slump in the mix must be consistent from batch to batch. Additional water to facilitate the placement must be avoided. Do not add cement powder to the already placed concrete mix, or a practice commonly called "burning" the concrete, in order to polish the surface of the concrete.

CURING

The use of low or high pressure water steam to accelerate the curing process, burlaps, plastic sheeting or addition of water to cure the concrete is not recommended as it may produce an uneven final color. Depending of the timing and placement of the concrete, efflorescence may appear on the concrete surface as a



Technology Solutions for the Construction Industry

white powder; this is caused by the water evaporation and makes it look faded. The residue must be removed as soon as it is practicable, before it turns into calcium carbonate, which may be permanent if not removed rapidly.

RECOMMENDATIONS

- Use a water reducing agent in the concrete mix.
- Request the concrete mix with the minimal slump required to work the concrete properly.
- Mix the pigment container prior to opening.
- At the ready mix plant, we recommend adding the pigment with the first amount of water. In this way there will be no need to adjust the slump.
- if the pigment is being added directly into the mix truck, in case that the mixer isn't full to it's maximum capacity it is necessary to request the operator to bring the concrete to the highest part in the mixer and pour the pigment directly into the concrete. Repeat the operation more than once to ensure that all the color is at the level of the concrete and then proceed to mix the concrete for about 5 minutes.
- Do not "BURN" the concrete when trowelling the surface.

CAUTION

This product is intended for professional use only. Before using or handling this product, read the Material Safety Data Sheet. It contains basic precautions and recommendations in reference to health and safety, which must be taken into consideration when handling this product.

STORAGE

Construcolor® B01 must be properly stored protected from extreme heat and freezing.

PACKAGING

Construcolor® B01 Liquid-gel pigment is pre-packaged in 5 gallons (47 lbs) and 1 gallon (9.4 lbs) pails.

SHELF LIFE

Construcolor® B01 shelf life is five years from the date of manufacture if stored properly in its original seal container in a temperature range between 23° degrees (-5°C) and 113°degrees (45°C).

DOSIFICATION TABLE

Based on 3,000 PSI or 5 Sack Mix

Color	1 gallon pails per 1 CY	5 gallons pails per 5 CY
B	1	1
D	2	2
F	3	3
H	4	4

WARRANTY

Construcolor® B01 is warranted to be of uniform quality within manufacturing tolerances. All information, recommendations, and suggestions concerning Construcolor® products are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, and suitability for his or her own use of the products described herein. Since the actual use by others is beyond Construcolor® control, no guarantee, expressed or implied, is made by Construcolor® as to the effects of such use, the results to be obtained, or the safety and suitability of the product.

SHORT FORM SPECIFICATION

All concrete mixes designated to be integrally colored in the construction documents and specifications shall be colored with Construcolor® B01 liquid-gel pigment, _____ color, manufactured by Construcolor® USA, Ltd. P. O. Box 333 Laredo, TX 78042 (210) 764-2700 / Toll Free 1 (866) 6HI TECH. No calcium chloride should be added to the mix. The slump should be consistent from batch-to-batch and as specified in the approved structural plans. All mix design, batching, addition of pigments, placing, finish and curing should be in accordance with the recommendations from Construcolor® B01 liquid-gel pigment technical bulletin.

CONSTRUCOLOR USA, LTD.
 P.O. BOX 333 Laredo, TX 78042
 Toll Free (866) 6 HI TECH (44-8324)
 www.construcolor.com info@construcolor.com