



CSI Asphalt Color Sealer Mix

Technical Data Sheet

Description

CSI Asphalt Color Sealer Mix is an innovative coloring system for asphalt emulsion seal coat. CSI Asphalt Color Sealer Mix when mixed with a commercial grade asphalt emulsion seal coat provides additional resistance to abrasion, and prevents damage to asphalt against the harmful effects of sunlight and oxidation. It prolongs asphalt pavement life, reduces maintenance costs, and beautifies the pavement by drying to harmonious earthtone colors and even textured surface coat. There are no toxic, carcinogenic agents, or organic solvents in CSI Asphalt Color Sealer Mix. There are no hazardous fumes given off as the final product cures.

Product Benefits

- CSI Asphalt Color Sealer Mix beautifies the pavement to harmonious earthtone colors.
- CSI Asphalt Color Sealer Mix is contains no toxic, organic solvents or carcinogenic agents.
- CSI Asphalt Color Sealer Mix is environmentally friendly in that it does not produce hazardous gases or fumes as the final product cures.
- Provides additional resistance to abrasion and prevents damage to asphalt against the harmful affects of sunlight and oxidation.

Pre-Application

- Prior to application, CSI highly recommends samples and or mock up areas be prepared to assure product compatibility and final color. The samples and or mock ups should represent the actual project conditions as best as possible.
- For old asphalt pavement, repair and patch all major pavement defects. All cracks, other than hairline cracks (larger than 1/8 of an inch wide) should be filled with a suitable hot pour crack filler. Scrape all oil spots to remove excess oil and dirt. Just before applying the mixed product, clean the asphalt pavement surface of all loose dust, dirt, leaves and debris.
- CSI Asphalt Color Sealer Mix is supplied in a dry concentrate form. Approximately 50-lbs. of CSI Asphalt Color Sealer Mix are required per 20 to 40 gallons of asphalt emulsion seal coat. The amount of seal coat to be mixed with is dependent upon the particular asphalt emulsion seal coat being used (with or without carbon black) and the color hue to be obtained.
- **Seal Coat with Carbon Black:**
 1. Mix CSI Asphalt Color Sealer Mix with UNCUT asphalt emulsion seal coating material in a conventional seal coating tank with a high speed mixer with a high sheer mixing blade. Add 2.5 lb of CSI Asphalt Color Sealer Mix material with approximately 1 gallon of seal coat or approximately 23% of seal weight depending upon desired color brightness. First add 50% of the water requirement, (this is the equivalent of 20 ounces of water to 1 gallon of seal coat) then add the CSI Asphalt Color Sealer Mix material slowly with the agitator operating. Mix for 10 to 20 minutes using a high speed mixer with a high sheer mixing blade to assure the Asphalt Color pigment is properly dispersed and to obtain a completely homogenous mixture.
 2. Add an additional amount of water necessary to achieve the viscosity required for application. This can be up to another 20 ounces per gallon of original seal coat. To obtain the proper consistency the approximate total water is 30% by volume of the amount of seal coating material you started with. These water amounts should not be exceeded.
 3. Add the amount of silica needed to achieve an appropriate mix for surface to be sealed. Total sand added should not exceed 10% of raw seal coat weight or 1 lb. for every gallon of seal coat. For a courser skid resistant surface 30 mesh silica is recommended.

4. Total product mixed should be approximately 30 gallons for one totally mixed CSI Asphalt Color Sealer Mix 50-lb. bag.

- **Seal Coat without Carbon Black:**

1. Mix CSI Asphalt Color Sealer Mix with UNCUT asphalt emulsion seal coating material in a conventional seal coating tank with a high speed mixer with a high sheer mixing blade. Add 1.3 lb of CSI Asphalt Color Sealer Mix material with approximately 1 gallon of seal coat, or approximately 12% of seal weight depending upon desired color brightness. First add 50% of the water requirement, (this is the equivalent of 12 ounces of water to 1 gallon of seal coat) then add the CSI Asphalt Color Sealer Mix material slowly with the agitator operating. Mix for 10 to 20 minutes using a high speed mixer with a high sheer mixing blade to assure the Asphalt Color pigment is properly dispersed and in order to obtain a completely homogenous mixture.
 2. Add an additional amount of water necessary to achieve the viscosity required for application. This can be up to another 12 ounces of water to 1 gallon of original seal coat. To obtain the proper consistency the approximate total water is 25% for CSI Asphalt Color Sealer Mix by volume of the amount of seal coating material you started with. These water amounts should not be exceeded.
 3. Add the amount of silica needed to achieve an appropriate mix for surface to be sealed. Total sand added should not exceed 10% of raw seal coat weight or 1 lb. for every gallon of seal coat. For a courser skid resistant surface 30 mesh silica is recommended.
 4. Total product mixed should be approximately 52 gallons for one totally mixed CSI Asphalt Color Sealer Mix 50-lb. bag.
- Because of the variety of asphalt emulsion seal coating products presently available, it is not possible to specify an exact mixing formula for optimum use of CSI Asphalt Color Sealer Mix with all seal coating products. ChemSystems, Inc. will advise a mixing formula if a one quart sample of the Applicator's seal coating product is submitted for analysis and trial. Colors and performance may vary. CSI highly recommends samples and or mock up areas be prepared to assure product compatibility and final color. The samples and or mock ups should represent the actual project conditions as best as possible.

Application

1. The final mixed product should not be applied to wet or damp pavement surfaces. Do not apply during rainy or damp weather, or when rain is anticipated within eight hours after application is completed. Pavement surface temperatures should be 50 °F (10 °C) and rising before application of the final mixed product is initiated. Surface temperatures exceeding 90 °F (32.2 °C) will create product streaking. At least three hours of daylight should remain after completing the application and the evening temperature should not go below 40 °F (4.4 °C).
2. The CSI Asphalt Color Sealer Mix should be applied in the same manner as conventional asphalt emulsion seal coatings with a spray, broom, squeegee, or seal coating machine.

Surface Protection and Maintenance

- Maintenance will vary depending on a number of factors, including volume and intensity of traffic, geographic location, ultraviolet light exposure and weather conditions.
- It is strongly recommended that a routine maintenance schedule for all colored sealed asphalt be followed so that surfaces maintain a high quality appearance. Every 18-36 months, or as required by volume and intensity of traffic, colored asphalt installations should be inspected, cleaned and resealed. Under normal wear and tear, proper application of the final product should not require resealing for up to five years. Reapplication should be at the recommended rates. Regular preventive maintenance can extend the life of asphalt pavement indefinitely.

- The final mixed product that has not dried may be removed by rinsing tools, equipment, and skin with water. Dried product may be cleaned from tools and equipment by soaking or washing with odorless petroleum naphtha spirits, kerosene, or diesel oils. Steam cleaning equipment for spray bars and seal coat distributors employing degreasing chemicals may also be used. Remove product from skin with industrial hand cleaners, or skin creams.

Coverage Rate and Drying Times

- The coverage will be between 30 and 80 square feet per gallon of the final mixture depending on the porosity and roughness of the surface to be covered. If the surface is extremely porous or extremely smooth two applications are recommended. For first time applications, two coats are also recommended.
- Cure time may be influenced by temperature and relative humidity. Under normal conditions, cure times are from two to eighteen hours. Sheltered or shady areas may also require longer cure times. In two coat applications, allow the first coat to cure before applying the second coat.

Shelf Life and Storage

CSI Asphalt Color Sealer Mix in dry form should be stored in a dry place where liquids are not able to penetrate the product. When CSI Asphalt Color Sealer Mix is mixed with asphalt emulsion seal coat it should be stored and handled like any standard asphalt seal coat product. Horizontal storage tanks equipped with centrally suspended horizontal agitators should be used. Positive displacement gear pumps capable of handling abrasive materials are recommended. Progressive cavity, diaphragm, and piston pumps may also be used. Since any asphalt emulsion may be damaged by freezing, it should be protected at all times when the temperature drops below 40 °F (4.4 °C).

Package Sizes

CSI Asphalt Color Sealer Mix is available in 50-pound bags.

Technical Data

Please refer to the corresponding MSDS for hazard-related information.

Product Handling

For complete instructions on handling and use, consult the corresponding Material Safety Data Sheet before using product.

Warranty

CSI Asphalt Color Sealer Mix, a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller's and manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product. If you have any questions, please contact ChemSystems, Inc.



*For complete information on all CSI products—including product information catalogs, product brochures, color charts, technical specifications, sales aids and more—contact ChemSystems, Inc.

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