

Pigment Dispersions for Solvent-Based Coatings

Color Solutions

Chroma-Chem® 844

General Information

CHROMA-CHEM 844 colorants are designed specifically for use in high-performance, non-aqueous, industrial and maintenance coatings. The colorants are exceptional for universal tinting of solvent-based industrial coatings.

Key Benefits

The various pigments utilized in this colorant line are dispersed in a proprietary acrylic resin vehicle. This vehicle provides excellent wetting and dispersing properties superior to other acrylic resins available. Propylene Glycol Monomethyl Ether (PM) Acetate and Naphthol Spirits are the solvents used in this line.

Each colorant contains a carefully selected and unique blend of vehicle, solvent, pigment and additives to yield acceptance in a wide range of non-aqueous coatings applications. The individual CHROMA-CHEM 844 Colorant formulations are designed to minimize the dispersing resin and additive levels needed to achieve colorant acceptance in a variety of coatings systems.

Properties

The CHROMA-CHEM 844 line is one of the first universal industrial colorant lines developed for broad based tinting of non-aqueous industrial coatings. The line of colorants exhibits excellent pigment development and rheological characteristics that contribute extraordinary stability to the colorant.

The CHROMA-CHEM 844 Colorants are controlled to a tinting strength tolerance of $\pm 2\%$ by volume and $\Delta E < 0.5$. Rheological properties of the colorants are also controlled to allow for use in volumetric tinting machines. This close control allows for accurate reproduction of color in our Industrial Color System or in custom systems through in-plant or dispenser tinting.

Applications

The CHROMA-CHEM 844 colorants are formulated for use in most non-aqueous industrial coatings including, but not limited to, aerosols, concrete protection, general industrial finishes, general OEM, industrial maintenance, marine, and protective coatings.

Compatibility

The CHROMA-CHEM 844 colorants have been evaluated in a large number of maintenance and industrial coating types at 5 to 15 percent loading. Properties tested included gloss, gloss retention, hardness, adhesion, effects of over-bake and effect of acid, alkali, solvent and water resistance.

Results are consistent with the individual, typical pigment properties, and good results are expected in a wide variety of coatings applications based on acrylic, polyester, cellulosic lacquer, vinyl lacquer, chlorinated rubber, alkyd, epoxy, polyurethane coatings. This line is also compatible with most aliphatic and aromatic hydrocarbons, esters, ethers, ketones, and reactive diluents.

Shelf Life

Proper handling is essential to maintain good quality. It is recommended that the colorants be mixed prior to use. Containers should be tightly sealed when not in use. Repacking the colorant into a smaller container should be considered if the colorant level in the container is less than 20% of the original amount and will be stored for an extended period of time.

Shelf life on the CHROMA-CHEM 844 colorants is 3 years for most colorants and 2 years for white and oxide colorants from the date of manufacture in unopened containers.



| Product Code | Description | Can-ister Code | CI Name | APEO-free | % Pigment | | % Non-Vol-atiles | | % Volatiles | | Spe-cific Grav-ity | VOC ^a g/L | Pigment Lightfastness | | Pigment Resistance | |
|--------------|----------------------|----------------|-----------------|-----------|-----------|--------|------------------|--------|-------------|--------|--------------------|-------------------------|-----------------------|------|--------------------|--------|
| | | | | | X Wt. | X Vol. | X Wt. | X Vol. | X Wt. | X Vol. | | | Mass | Tint | Acid | Alkali |
| 844-0061 | Titanium White | TW | White 6 | Yes | 67.7 | 33.2 | 15.3 | 29.0 | 17.0 | 37.8 | 1.96 | 335 | N | N | N | N |
| 844-0152 | Flattening Agent | | White 27 | Yes | 28.2 | 14.7 | 17.1 | 18.0 | 54.7 | 67.3 | 1.09 | 597 | ** | ** | ** | ** |
| 844-0353 | Bon Red | | Red 48:2 | No | 23.4 | 14.9 | 26.0 | 27.4 | 50.6 | 57.7 | 1.10 | 559 | A | A | S | A |
| 844-0451 | Quinacridone Red | QR | Violet 19 | No | 20.9 | 13.2 | 24.8 | 23.8 | 54.3 | 63.0 | 1.01 | 550 | S | S | N | N |
| 844-0453 | Quinacridone Magenta | | Red 122 | Yes | 12.5 | 8.6 | 34.4 | 31.9 | 53.1 | 59.5 | 0.99 | 525 | N | N | N | N |
| 844-0455 | Quinacridone Red | QR | Violet 19 | Yes | 22.2 | 14.0 | 20.0 | 19.4 | 57.8 | 66.6 | 1.01 | 583 | S | S | N | N |
| 844-0550 | Mono Azo Red | | Red 170 | Yes | 29.1 | 21.5 | 19.1 | 19.5 | 51.8 | 59.0 | 1.10 | 570 | N* | S* | N | N |
| 844-0982 | Lead Free Orange | UO | Orange 34/36 | No | 24.2 | 16.1 | 21.9 | 21.2 | 53.9 | 62.7 | 1.01 | 543 | S | S | N | N |
| 844-0985 | Lead Free Orange | UO | Orange 34/36 | Yes | 24.2 | 16.1 | 21.9 | 21.2 | 53.9 | 62.7 | 1.01 | 543 | S | S | N | N |
| 844-1053 | Red Iron Oxide Y/S | | Red 101 | Yes | 64.8 | 27.3 | 16.3 | 31.5 | 18.9 | 41.2 | 2.10 | 396 | N | N | N | N |
| 844-1054 | Trans Red Iron Oxide | | Red 101 | No | 21.1 | 5.6 | 32.8 | 36.3 | 46.1 | 58.1 | 1.18 | 545 | N | N | N | N |
| 844-1063 | Red Oxide Y/S | RO | Red 101 | Yes | 60.0 | 22.8 | 13.7 | 24.6 | 26.3 | 52.6 | 1.94 | 509 | N | N | N | N |
| 844-1352 | Burnt Umber | BU | Brown 7 | No | 46.1 | 17.7 | 23.5 | 34.1 | 30.4 | 48.2 | 1.53 | 466 | N | N | N | N |
| 844-1615 | Van Dyke Brown | | Red 101/Black 7 | No | 41.7 | 18.2 | 16.5 | 20.9 | 41.8 | 60.9 | 1.41 | 589 | N | N | N | N |
| 844-1852 | Trans Yellow Oxide | | Yellow 42 | Yes | 30.0 | 10.5 | 33.3 | 39.4 | 36.7 | 50.1 | 1.26 | 461 | N | N | N | N |
| 844-1863 | Yellow Iron Oxide | YO | Yellow 42 | Yes | 53.5 | 22.4 | 15.0 | 23.2 | 31.5 | 54.4 | 1.67 | 526 | N | N | N | N |
| 844-2075 | Raw Umber | | Brown 7 | Yes | 39.6 | 11.4 | 20.9 | 28.9 | 39.5 | 59.7 | 1.46 | 577 | N | N | N | N |
| 844-2557 | Lead Free Med Yellow | MY | Yellow 83/151 | Yes | 38.5 | 22.9 | 21.8 | 23.6 | 39.7 | 53.5 | 1.15 | 456 | S | S | N | N |
| 844-2560 | Fast Yellow Light | | Yellow 97 | Yes | 24.0 | 17.0 | 23.2 | 21.7 | 52.8 | 61.3 | 0.99 | 521 | S | S | N | N |
| 844-2852 | Organic Yellow G/S | OY | Yellow 175 | Yes | 27.0 | 18.7 | 28.2 | 28.5 | 44.8 | 52.8 | 1.09 | 489 | N* | ** | ** | ** |
| 844-5557 | Phthalo Green B/S | PG | Green 7 | Yes | 20.4 | 10.8 | 29.6 | 30.4 | 50.0 | 58.8 | 1.09 | 543 | N | N | N | N |
| 844-5558 | Phthalo Green B/S | PG | Green 7 | No | 20.4 | 10.8 | 29.6 | 30.3 | 50.0 | 58.9 | 1.09 | 544 | N | N | N | N |
| 844-7253 | Phthalo Blue G/S | | Blue 15:4 | No | 22.0 | 15.7 | 37.4 | 38.4 | 40.6 | 45.9 | 1.09 | 443 | N | N | N | N |
| 844-7260 | Phthalo Blue I/S | | Blue 15:2 | No | 20.4 | 10.8 | 29.6 | 30.3 | 50.0 | 58.9 | 1.09 | 544 | N | N | N | N |
| 844-7262 | Phthalo Blue I/S | PB | Blue 15:2 | No | 21.0 | 14.0 | 29.6 | 28.4 | 49.4 | 57.6 | 1.02 | 505 | N | N | N | N |
| 844-7265 | Phthalo Blue I/S | PB | Blue 15:2 | Yes | 20.9 | 14.0 | 29.6 | 28.5 | 49.5 | 57.5 | 1.02 | 504 | N | N | N | N |
| 844-7270 | Phthalo Blue R/S | | Blue 15:2 | No | 26.0 | 17.6 | 21.0 | 20.0 | 53.0 | 62.4 | 1.02 | 539 | N | N | N | N |
| 844-8852 | Carbazole Violet | | Violet 23 | No | 5.1 | 3.1 | 32.9 | 28.9 | 62.0 | 68.0 | 0.93 | 576 | N | N | N | N |
| 844-9451 | Quinacridone Violet | QV | Violet 19 | Yes | 20.1 | 13.5 | 23.8 | 22.8 | 56.1 | 63.7 | 1.00 | 561 | S | S | N | N |
| 844-9955 | Lamp Black | LB | Black 7 | No | 22.3 | 13.3 | 29.8 | 30.0 | 47.9 | 56.7 | 1.07 | 511 | N | N | N | N |
| 844-9956 | Carbon Black | | Black 7 | No | 22.3 | 13.3 | 29.8 | 30.0 | 47.9 | 56.7 | 1.07 | 511 | N | N | N | N |
| 844-9957 | Lamp Black | LB | Black 7 | Yes | 21.9 | 13.1 | 31.2 | 31.4 | 46.9 | 55.5 | 1.07 | 501 | N | N | N | N |
| 844-9959 | Jet Black | | Black 7 | Yes | 9.5 | 5.6 | 38.1 | 37.5 | 52.4 | 56.9 | 1.05 | 551 | N | N | N | N |
| 844-9960 | Tinting Black | | Black 7 | No | 23.0 | 14.4 | 36.3 | 38.2 | 40.7 | 47.4 | 1.13 | 458 | N | N | N | N |

^aExpected values based on formulation

| Lightfastness and Resistance Key | | | |
|----------------------------------|------------------------|----|----------------------------------|
| N | no bleed/discoloration | * | no Florida data, only Fadeometer |
| S | slight | ** | no data |
| A | appreciable | | |

Lightfastness and Resistance information is provide for guidance purposes only.
 Source: NPIRI Raw Materials Data Handbook Volume 4 (© 2000)

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