

Solvent-based colorants for industrial point-of-sale and in-plant applications

Color Solutions

ChromaChem® 844



- Best-in-class quality for color retention, dispensability, and consistency in a wide variety of chemistries
- Specially designed for use in high-performance, non-aqueous, industrial and maintenance coating
- Colorant formulations minimize dispersing resin and additive levels
- Colorants pigments provide wide range of shades
- Excellent control on tinting strength volume
- Good compatibility with large number of maintenance and industrial coating
- Available for volumetric dispensing and in-plant tinting

General information

ChromaChem 844 colorants are designed specifically for use in highperformance, non-aqueous, industrial and maintenance coatings. 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.

Each colorant contains a carefully selected and unique blend of vehicle, solvent, pigment and surfactants to yield acceptance in a wide range of non aqueous coatings applications. The individual ChromaChem 844 colorant formulations are designed to minimize the surfactant and additive levels needed to achieve colorant acceptance in a variety of coatings systems.

The pigments in the colorants were chosen to provide a wide range of shades. However, good durability, lightfastness and chemical resistance depend a great deal on the coatings, pigment choice, substrate and application conditions. It is highly recommended that the colorants be tested in the actual conditions of use to verify the suitability of the product.

Tint strength control

ChromaChem 844 colorants are controlled to a tinting strength tolerance of $\pm 2\%$ by volume, $\Delta E < 0.5$ vs. standard. This close control allows for accurate reproduction of color in our Industrial Color System, in custom systems, or for in-plant use. Rheological properties of the colorants are also controlled to allow for use in volumetric tinting machines. Volumetric formulas using ChromaChem 844 colorants for common color collections such as Portfolio of Color, Federal Standard 595b, RAL colors and British Standard colors can be developed to suit a variety of paint systems. Please contact your Vibrantz's Technologies technical service laboratory for further information.



Product applications

ChromaChem 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. Performance with respect to these properties is excellent and consistent with what might be expected from the particular pigments. ChromaChem 844 colorants are recommended for use in a wide variety of coatings systems such as:

- Acrylics
- Alkyds
- Epoxies
- Polyurethanes
- Polyesters
- Cellulosic lacquers
- Vinyl lacquers
- Chlorinated rubber

The effect of the colorants on coating performance depends upon the vehicle used and the amount of colorant added. The tinted coatings should be tested by the user to insure that the desired performance specification, such as film hardness, gloss, drying time and other applicable film characteristics, are satisfied. Since coatings formulations vary from one manufacturer to the next, the base systems may require adjustment to improve color acceptance characteristics.

Colorant acceptance

Indications of incomplete colorant acceptance by a base, also known as poor color development, can include nonuniformity of the color in the tinted paint or dry film, or the creation of a color that is lighter or darker than expected. Flooding, floating and flocculation are examples of specific conditions related to incomplete colorant acceptance. Additives are often used to correct colorant acceptance issues. The Vibrantz's Technologies technical service laboratory, with extensive experience in correcting acceptance problems, can make specific recommendations based on testing performed on the specific paint base. The Vibrantz's Technologies laboratory staff are dedicated to providing assistance in testing and using our products.

| Masstone | Tint | Product code | Colorant description | CI pigment | Specific gravity | % Composition by weight | | | Light fastness | | VOC*g/L |
|----------|------|--------------|--------------------------------|------------------|------------------|-------------------------|----------------|-----------|----------------|------|---------|
| | | | | | | Prime pigment solids | Vehicle solids | Volatiles | Mass | Tint | |
| | | 8440061 | TW Titanium white 4 L | PW 6 | 2.02 | 68.5 | 14.5 | 17.0 | N | N | 343 |
| | | 8440451 | QR Quinacridone red 4 L | PV 19 | 1.01 | 20.0 | 26.9 | 53.1 | S | S | 535 |
| | | 8440982 | UO Lead free orange 4 L | PO 34/ PO 36 | 1.04 | 24.7 | 26.2 | 49.0 | S | S | 512 |
| | | 8441054 | Trans red oxide 4 L | PR 101 | 1.16 | 20.0 | 30.7 | 49.3 | N | N | 570 |
| | | 8441063 | RO Red oxide 4 L | PR 101 | 1.97 | 61.2 | 12.3 | 26.2 | N | N | 515 |
| | | 8441352 | BU Burnt umber 4 L | PBR 7 | 1.50 | 44.0 | 24.0 | 32.0 | N | N | 478 |
| | | 8441852 | Trans. yellow iron oxide 4 L | PY 42 | 1.27 | 30.0 | 32.7 | 37.3 | N | N | 475 |
| | | 8441863 | YO Yellow oxide 4 L | PY 42 | 1.68 | 53.7 | 14.4 | 31.9 | N | N | 535 |
| | | 8442555 | MY Lead free medium yellow 4 L | PY 83/ PY 151 | 1.15 | 36.0 | 24.5 | 39.5 | S | S | 452 |
| | | 8442852 | OY Organic yellow 4 L | PY 175 | 1.15 | 36.0 | 24.4 | 39.5 | N* | ** | 452 |
| | | 8445558 | PG Phthalo green 4 L | PG 7 | 1.12 | 21.7 | 32.1 | 45.5 | N | N | 509 |
| | | 8447262 | PG Phthalo blue 4 L | PB 15:2 | 1.06 | 20.6 | 34.7 | 44.7 | N | N | 474 |
| | | 8449451 | QV Quinacridone violet 4 L | PV 19 | 1.03 | 21.6 | 23.1 | 55.3 | S | S | 568 |
| | | 8449955 | LB Lamp black 4 L | PBK 7 | 1.07 | 20.1 | 32.8 | 47.0 | N | N | 502 |

All data obtained directly from pigment suppliers, individual testing is recommended. Lightfastness is measured against the blue wool standard on a scale of 1 to 8 where 1 = severe change and 8 = no change.

*d = color darkens.

Lightfast and Resistance Key

N = No bleed / discoloration

S = Slight

A = Appreciable

* no Florida data, only Fadeometer

** no data



Health & Safety
OHSAS 18001



Quality
ISO 9001



Environment
ISO 14001



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