

ChromaFlair® L-Spec Light Interference Pigments

Seeing Color In A Whole New Light



CHROMAFLAIR®
COLOR SHIFTING PIGMENTS

Key Features

- Opaque, thin, multi-layered microflakes
- Dramatic color changes when viewed from different angles
- Easy to stir in or incorporate into paints and dyes

Applications

- Decorative effects
- Product differentiation
- Broad range of custom applications in automotive and consumer product industries

ChromaFlair pigments are unique, multi-layer pigment flakes that give paints, coatings, plastics, textiles and packaging the ability to change color when viewed from different angles. Created using a revolutionary thin-film technology, each flake exhibits a wide range of hues depending on the angle at which it is viewed and the angle of incidence of light – a dramatic color shift that is even achievable in low-light environments. Highly chromatic, durable and easy to incorporate, ChromaFlair pigments can add value and appeal to virtually any product where color is a key differentiating factor.

ChromaFlair L-Spec is ideal for general-purpose applications. Seven standard colors are currently available and their names reflect the color seen at approximately 0° and 45° respectively, the number represents the pigment's approximate hue at normal viewing angle.

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Specifications

Parameter	Red/Gold 000L	Silver/Green 060L	Gold/Silver 080L	Green/Purple 190L	Cyan/Purple 230L	Blue/Red 280L	Magenta/Gold 334L
Chemical nature	Metal-coated magnesium fluoride mixture						
Certifiable Properties							
Color tolerance delta E cmc ¹	2.0	3.0	2.0	2.0	2.0	2.0	2.0
L* ¹	43.4	61.7	73.9	53.2	50.4	40.5	42.8
a* ¹	31.5	10.5	9.2	-39.7	-21.9	19.1	26.7
b* ¹	4.2	8.3	61.1	-1.1	-21.7	-48.1	-9.0
Particle size - D50 ²	17 to 21 µm	17 to 21 µm	17 to 21 µm	17 to 21 µm	17 to 21 µm	17 to 21 µm	17 to 21 µm
Particle size - D99 ²	<67 µm	<67 µm	<67 µm	<67 µm	<67 µm	<67 µm	<67 µm
Dowanol® PnP Content % by Weight ³	9 to 11	9 to 11	9 to 11	9 to 11	9 to 11	9 to 11	9 to 11
Typical Properties							
Relative flake thickness ⁴	1.14	2.62	1.00	2.27	1.97	1.32	1.17
Specific surface area ⁵ (m ² /gram)	0.65	0.29	0.75	0.33	0.38	0.57	0.64
Dry specific gravity (H ₂ O=1.0 g/cm ³)	3.01	2.98	3.02	2.91	2.94	2.95	2.99
Wet specific gravity (H ₂ O=1.0 g/cm ³)	2.43	2.38	2.44	2.39	2.40	2.42	2.43

1. JDSU Test Method 21074545 and JDSU Test Method 21074804

2. JDSU Test Method 04092004-J7BI-BP3K

3. JDSU Test Method 04142004-2MUS-ZL14

4. Flake thickness is related to Gold/Silver 080

5. Specific area reported is the theoretical coverage of a monolayer of pigment flakes

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-707-525-7007 in North America and +800-5378-JDSU worldwide or via e-mail at chromaflair@jdsu.com.

Sample: 10095049

Product Code	Appearance
10095049	Red/Gold 000L (Shifts from red through orange and yellow into green)
10095054	Silver/Green 060L (Shifts from silver through green into purplish blue)
10095055	Gold/Silver 080L (Shifts from gold to bluish silver)
10095052	Green/Purple 190L (Shifts from green through blue and red into orange)
10095053	Cyan/Purple 230L (Shifts from cyan through purple into reddish orange)
10095057	Blue/Red 280L (Shifts from blue through purple to warm red)
10095050	Magenta/Gold 334L (Shifts from magenta through red, orange and gold into yellow)

Notes:

- The information furnished above has been compiled from sources considered to be dependable and is believed to be accurate. However, users should conduct confirming tests in their own plant or laboratory to determine suitability, as conditions for use are not under our control. JDSU makes no guarantee as to the results obtained in using the material, and shall not be held liable for any damages resulting from mixing or further processing that is inconsistent with recommended usage. Because we cannot control the application, use, or processing of the products, we cannot accept responsibility. No statement contained herein should be construed as a recommendation for any use which would violate any patent rights.
- Additional safety information is contained in the product's Material Safety Datasheet, which all users are strongly urged to consult.
- Approvals: ChromaFlair pigment is made entirely of components registered with leading international authorities including EINECS, MITI, TSCA, DLS, Canadian DSL and AICS, and does not require its own registration.