

EXBERRY®

Micronized Powders



Per Pihlgard, PhD, GNT USA Inc.
Clean Label Conference March 26-28, 2018

EXBERRY®

GROWING COLORS

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3 Main Color Categories



Artificial

- FD&C dyes
- Market share decreasing
- Key players now offering other solutions to maintain business



Formulated

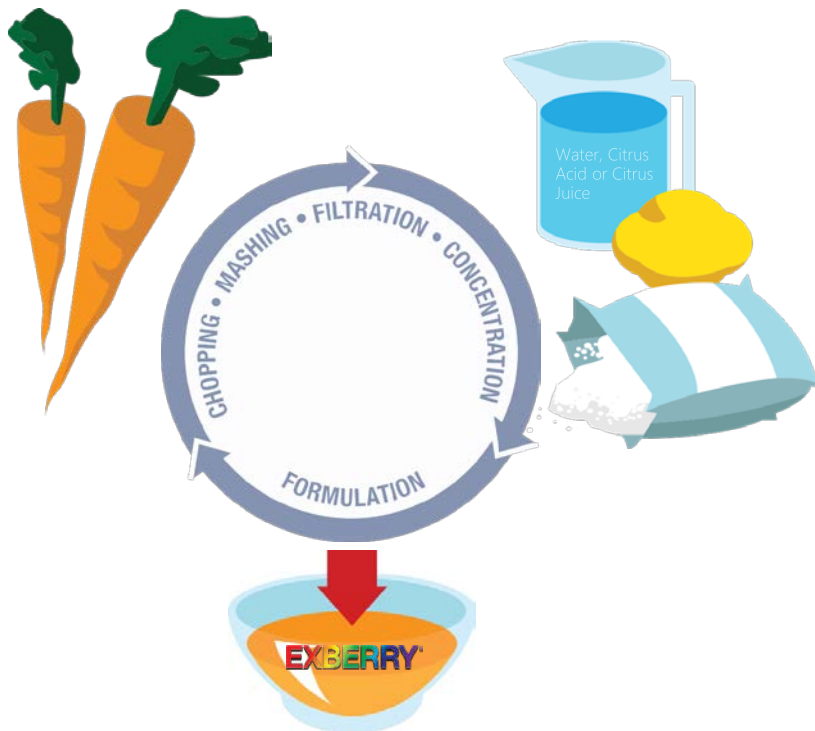
- Carmine, Annatto, beta-carotene
- Processing similar to artificial
- Non-global acceptance



Coloring Foods

- Exclusively from edible fruits & vegetables
- Worldwide acceptance
- Control of entire supply chain guarantees competitiveness

Processing of EXBERRY®



- Produced from **edible** fruits, vegetables and other plants
- Processed **without** selective extraction of the pigments
- Processed with **water**, no organic solvents used
- No **added** artificial emulsifiers, preservatives, etc
- Food ingredients that **can be eaten** in their own right

Ingredient Declarations

	Legal Classification	Labelling
USA	21CFR73.250 Fruit juice color 21CFR73.260 Vegetable juice color 21CFR73.530 Spirulina extract 21CFR73.600 Turmeric	"Fruit and Vegetable Juice (color)" "Spirulina Extract" "Turmeric (color)"
Canada	Colouring Foodstuffs (ingredient)	Concentrates (cherry, carrot) Cherry concentrate, Carrot concentrate
EU	Colouring Foodstuffs (ingredient)	Concentrates (cherry, carrot) Cherry concentrate, Carrot concentrate
Brazil	Coloring Foodstuffs (ingredient)	Concentrates (cherry, carrot) Carrot and Cherry concentrate for color

EXBERRY[®] Micronized Powders



Features

..... Reduced Particle Size

	D ₅₀	D ₉₇
Standard Powders	30µm - 50µm	100µm - 190µm
MN Powders	10µm - 15µm	20µm - 30µm

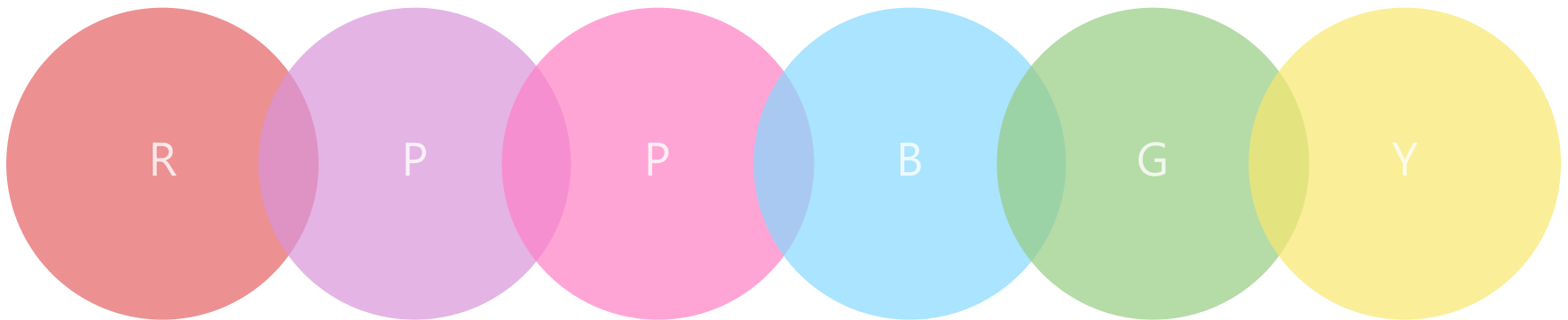


Benefits

..... The micronized powders adhere to the other particles which creates a homogenous color distribution

- Reduced separation effects
- Homogenous color effect (individual particles not visible)
- Higher perceived color in the powder
- Improved mixing stability for powder blends

A Wide Array of Color Shades are Available



In addition, the powders can be blended to achieve unique hues

Micronized Powders Help Deliver Color Evenly



Micronized powders help avoid separation during transit and storage



Dry Application

Color is evenly distributed and will not separate further in processing and packaging

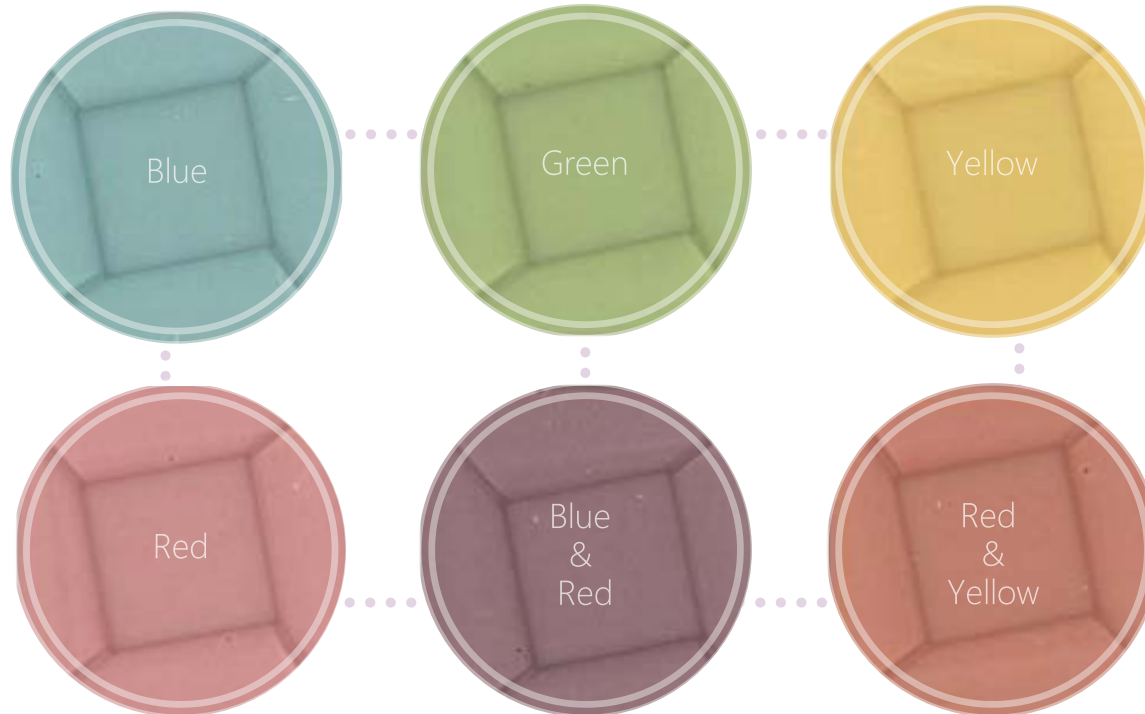


Liquid Application

Rapid dissolution of dispersed color particles

Uniformly Distributed Color

No Introduction of Oils or Fats



Even Distribution of Color in the Tablets

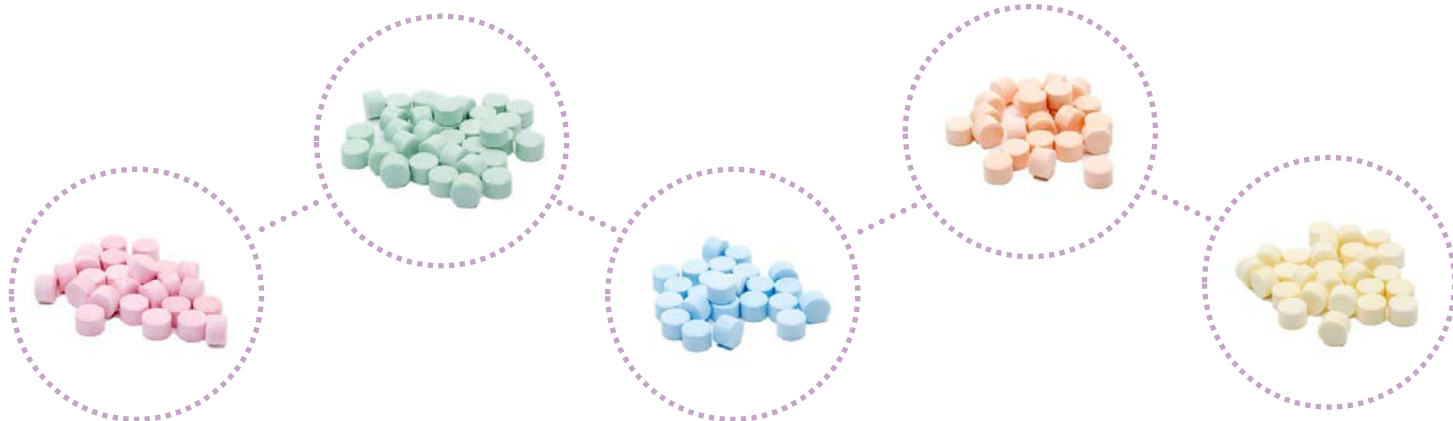
Standard Powder

- Less colorful
- More uneven color



Micronized Powder

- More vivid color
- Color is very even



Ideal for Situations Where Even Coating is Necessary



EXBERRY® Micronized Powders Have Many Advantages



Exhibit even distribution when mixed in powders with different particle sizes



Adhere to the larger particles (sugars etc.) which leads to homogeneous color distribution and less separation



Great for chocolate or compound coating



Good solubility in water when mixed into a powdered beverage base



Great for delivering color to tablets



Easily incorporated into spice blends



Very useful for pre-mixes or products that need to withstand transportation or extended storage where separation otherwise may occur

Contact Us

We Look Forward to Hearing From You!



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