FruitMax® All-Natural colors
Ingredients your consumers will understand!

Clean Label Conference, March 26-28 2018
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Content

Why use All-Natural colors?

What are the benefits of the new range?

How can clean colors strengthen your brand?
Healthy Consumers want natural healthy food

That is...

- Safe to eat
- Recognizable
- Appealing
- Appetizing
- Minimally processed
- No chemicals
- Not artificial
- Clean label
“All Natural” front pack claims requires All-Natural ingredients through the whole value chain
What are Clean Label colors?

*Chr. Hansen’s definition:*

Clean Label colors are minimally-processed fruit, vegetable or edible plant concentrates.

Clean Label colors are gently crafted with traditional production methods from natural ingredients and without use of solvents and preservatives.

It is a recognizable food coloring ingredient that can be labeled simply as ‘Fruit & vegetable juice’ or plant extracts like ‘spirulina extract’ (for color) on a list of ingredients.
Introducing 3 new yellow and orange All-Natural Clean Label colors
**Introducing: ‘All-Natural’ yellow and orange FruitMax® solutions**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Simple labelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>FruitMax® Yellow 1600 WS</td>
<td>Orange carrot juice concentrate (color)</td>
</tr>
<tr>
<td>FruitMax® Yellow 1601 WS</td>
<td>Orange carrot juice concentrate (color)</td>
</tr>
<tr>
<td>FruitMax® Orange 1600 WS</td>
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</tr>
</tbody>
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These colors are in full compliance with 21 CFR Part 73 and is approved for use in food and meet the specifications listed in the fruit (21 CFR 73.250)

Label in accordance with 21 CFR 101.22: Vegetable juice or Orange carrot juice concentrate (for color)

Unlike the definition for food additive, there is no GRAS exemption for color additives.
‘All-Natural’ and non-GMO FruitMax® color range

The new color range is made with all natural non-GMO ingredients and are free from:
- invert sugar
- maltodextrin
- synthetically produced citric acid
- synthetic tocopherol
- and artificial preservatives.
Clean Label Yellow & Orange Shades for beverages

FruitMax® Yellow 1600 WS
- Vibrant yellow shade
- Yellow 5 and beta-carotene replacer
- Great light stability
- Orange carrots
- Labeled as “vegetable juice for color”

FruitMax® Orange 1600 WS
- Vibrant orange shade
- Yellow 6 and beta-carotene replacer
- Great light stability
- Orange carrots
- Labeled as “vegetable juice for color”

As with all juice pulp, natural settling of the color may occur. Therefore, these colors are work best in beverages that contain at least 3% juice.
Clean Label yellow & orange shades for fruit preparations and yoghurt

FruitMax® Yellow 1600 WS
Dosage in fruit preparation: 0.85%
Dosage in yoghurt: 0.13%

FruitMax® Yellow 1601 WS
Dosage in fruit preparation: 0.85%
Dosage in yoghurt: 0.13%

FruitMax® Orange 1600 WS
Dosage in fruit preparation: 0.63%
Dosage in yoghurt: 0.095%

Abricot fruit preparation: pH 3.9, 44°Brix, 15% of colored fruit preparation in stirred yoghurt 3.5% fat content
Clean Label yellow and orange solutions are very heat stable

Before heat treatment

Heat treatment (195°F – 5 min)

After heat treatment

Measured color change

FruitMax® Yellow 1600 WS  DE*2000 = 0.2

FruitMax® Yellow 1601 WS  DE*2000 = 0.8

FruitMax® Orange 1600 WS  DE*2000 = 0.3
Clean Label yellow and orange solutions have very good shelf life stability

Storage of yoghurt: 39-41°F, 8 weeks

Day 0  Week 2  Week 4  Week 6  Week 8

Yoghurt made with aged Fruit Preparation

Storage of fruit preparation: 50°F, 8 weeks

Day 0  Week 4  Week 8

**FruitMax® Yellow 1600 WS**

**FruitMax® Yellow 1601 WS**

**FruitMax® Orange 1600 WS**

DE*2000 < 0.6

DE*2000 < 0.6
These colors are part of a full range of ‘All-Natural’ colors
Bright Clean Label colors that can be blended to create a variety of Shades
Our ‘All-Natural’ Clean Label colors meet your consumers need for natural recognizable ingredients

Each solution...
- provides a colorful vibrant shade with good stability
- is made only with ingredients from natural sources
- is free from preservatives
- can be labeled simply as “vegetable and fruit juice for color”
How can Clean Label colors strengthen your brand?

**Strengthen consumer trust and loyalty**
Fruit and vegetable juice concentrates are recognizable ingredients that meet consumer expectations for clear, recognizable product information. They can help build consumer trust and loyalty and broaden the consumer target group.

**Revitalize your brand and tell appealing stories**
Minimally processed colors enable you to strengthen or credibly reposition your brand towards a more natural profile.

**Ensure regulatory compliance in new markets**
Despite a lack of consensus on how to define Clean Label or the term natural, FruitMax® colors are made only with natural ingredients, and are an accepted coloring ingredient in most markets worldwide.
Solution

Coloring fruit and vegetable juices enable you to tell the story your customers are looking for
Clean

Every color tells a story

THANK YOU FOR YOUR ATTENTION!