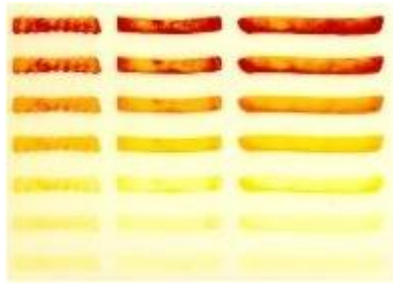


# USDA Munsell Frozen French Fry Color Standards

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The visual USDA Frozen French Fried Potatoes Grades and Standards come in the form of a printed leaflet that depict a series of seven potato color grades in short, long and crinkle cut forms. It is intended for use in classifying the visual color of frozen French fried potatoes, or other similarly fried products.



## Source: Visual USDA French Fry Color Standards

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[www.xrite.com/top\\_munsell.aspx](http://www.xrite.com/top_munsell.aspx)

[Munsell USDA Frozen French Fry Standard - 5](#)

Printed color ranges meet specifications set by USDA for frozen French fry potatoes and run from low 000 to high 4. It comes as a set of 5 identical reproductions come in a folder with instructions for visual evaluation of fry color.

## How HunterLab Meets this Application

The HunterLab D25 NC is the best choice for this non-uniform potato application. For color QA of fried products you can use the L\* lightness (lower with increased bake level) or YI Yellowness Index metrics (higher with increased bake level) and set your own target values for optimal frying in those metrics.

If you wish to also report the correlated USDA Fry Color grade, here is how best to do it.

- After draining and cooling close to ambient, layer fries in a 12 inch diameter pan. Try to make them as a single layer with minimal spaces between the fries.
- Using the [Munsell USDA Frozen French Fry Standard - 5](#), make a visual judgment as to which USDA Fry Color grade most closely matches the color of the fries.
- Read the sample color using D25 NC set for 2 rotations of 5 seconds. Each rotation will average multiple readings of the fries using a 25 mm area of view.
- Report L\*, a\*, b\* and Yellowness Index values.
- Based on a range of French Fry Color samples, including light and dark limits, determine an L\* lightness or YI yellowness correlation to the USDA Fry Color Grade and report the grade.