# CON-TROL-CURE® NEW UV INTENSITY LABELS

Simple, highly accurate method for measuring specific UV dosage; photochromatic labels change color based on the UV energy received



The New UV Intensity Labels are simple, reliable, and easy to use indicators of accumulated UV light dosage. They can be used to determine levels of UV dose with a simple, visual inspection of its color change. They immediately begin to change color upon receiving a UV dose. The label starts off as a bright yellow and turns to a deep blue.

New UV Intensity Labels have a sensitivity range that is 5 times greater than the product they have replaced, the old UV Intensity Labels (N010-001).

The dramatic improvements over the old Intensity Labels include:

- Much greater color shift
- More stable, repeatable and consistent color change
- Not subject to increasing color changes at elevated temperatures



The New UV Intensity Labels begin as a bright yellow color (left). As they are exposed to UV, they become increasingly more green.



After continued UV exposure, the Labels take on a deeper shade of green, eventually reaching their maximum exposure color, solid blue.

The versatility of this unique UV measurement tool allows users to measure a significant range of UV doses. New UV Intensity Labels measure UV doses from 0mJ/cm<sup>2</sup> to greater than 5,000mJ(5J)/cm<sup>2</sup>. Due to their paper-thin profile and thermal stability, they can be used in all applications where a radiometer is not possible, including: Web printing, Sheet Fed printing, Exposure Verification of exposed products, 3-D curing, and personal UV exposure level testing.

New UV Intensity Labels are available in packages of 990 labels (9 sheets of 110 labels.) Dimensions: <sup>3</sup>/<sub>4</sub>"H x 1"W (19mm x 25mm).

#### **FEATURES/BENEFITS**

- Accurate visual determination of UV dose made possible
- · Monitor UV dose in difficult-to-access curing environments
- Detect UV lamp degradation and equipment failures
- Provide user with periodic assurance that their UV source is performing to expectations
- Greater rate of color change provides clearer, more precise UV dose determination
- Determine dose profile in 3D curing chambers or across wide webs to ensure even cure
- · Measure the dose of sunlight in outdoor curing applications
- · Evaluate and compare multiple UV light sources

PART NUMBER N010-005 DESCRIPTION

NEW UV INTENSTY LABELS

### 24-HOUR PRODUCT SERVICES Internet: www.uvprocess.com E-mail: info@uvps.com



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## CON-TROL-CURE® NEW UV INTENSITY LABELS

#### Establish Your Own Reference New UV Intensity Labels for "Good" and "Bad" UV Cure

1. Set-up your UV curing system at a speed and intensity that you know it is curing properly.

2. Remove one adhesive backed New UV Intensity Label from the carrier sheet and stick it securely onto the material that you will be passing through your UV curing system. Pass the material with the Label through your UV curing system at the speed and intensity that matches step 1 above. This becomes the reference Label for "good" cure.

3. Now, monitor the curing characteristics as you incrementally increase your line speed. When it is just beginning to undercure, pass another New UV Intensity Label through your UV curing system. This becomes the reference Label for "bad" cure.

4. You now have your reference Labels representing "good" and "bad" cure. If so desired, you can add a third, helpful reference Label: the "minimum cure" Label.

A "minimum cure" Label will represent the point at which product is still successfully curing, but it is time to perform maintenance on your UV curing system. (That may mean swapping your UV lamps and/or reflectors for new ones, or simply cleaning from them the residue that accumulates over time.) Remember, New UV Intensity Labels only indicate UV dose received. They do not tell you what is causing the decline in measured UV dose. That is up to you to ascertain.

5. To create a "minimum cure" Label, gradually decrease the line speed from the setting you used to create the "bad" product. Pass New UV Intensity Labels through your system just until a noticeable color change is observed. Once a visual difference has been reached, check to ensure that you are successfully curing your product. This Label now becomes your 3rd reference Label: The "minimum cure" Label.

6. Keep your reference Labels away from light sources (in an envelope in your desk drawer) so that ambient UV won't continue the color change.

7. You need to establish how often you are going to evaluate your UV curing system. Some send a New UV Intensity Label through their system at the beginning of each day. Others at the start of each shift. Some every hour. Whatever you determine your needs to be, you must compare each New UV Intensity Label tested to your reference Labels prior to curing this product\* on this UV curing machine.\*

\* Each machine and each product cured on it will require its own reference set. Additional reference sets will need to be created if this product is cured on different UV curing machines.





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