

LOVIBOND® COLOUR MEASUREMENT

Measuring Colour Since 1880

# When Colour Becomes a Problem

# HERE ARE FIVE STEPS TO A SOLUTION



#### **1. WAS THEREA SPECIFICATION?**

This could be an agreed master sample, a physical colour reference, a digital colour reference or perhaps a full colour space coordinate and tolerance.

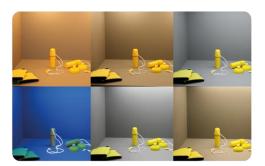
If a specification was not set up, don't worry we can help you. Contact one of our experts and we'll work with you to get your specification set up.

If there was, let's get out the specification or standard and take a look at what can be improved.

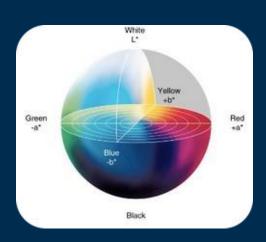
## 2. COLOUR VARIABLES

A visual assessment of colour can be complicated by a number of variables. Such as:

- The Viewer Not all of us see colour in precisely the same way. Eyesight, colour vision and colour perception varies from person to person. Even our mood can affect our colour perception and hence visual assessment.
- Illuminant Our perception of colour is reliant on the light that reflects from a surface or transmits through a media. The nature of that light will affect your individual perception of colour. To try this, look at your standard and sample side-by-side under your office lighting and then by a window letting in daylight.
- Viewing angle and surface characteristics Your product may be the correct colour but if the surface is glossier than the standard it may look different.







In order to solve the problem you are experiencing, you will need to communicate your acceptable colour standard within your supply chain.

This can be as simple as a product sample which you decide is the correct colour (and hence becomes your "standard") and an agreed light source (perhaps natural daylight from a north facing window?). Make sure that at least two people at each point in the supply chain view the standard side-by-side against a production sample, independently, and agree a visual colour match.

For more subtle colour and appearance differences, it is strongly advised to set up a specification based upon a colour "space" where the illuminant, observer and pass/fail tolerance can be precisely controlled.

For a rapid and flexible method of agreeing colour, you could acquire handheld colour measurement devices, measure colour directly, and thus remove the subjectivity and wide variability of human observers.

#### 4. COLOUR STANDARD & TOLERANCE

Using a handheld colour measurement device, you can set your colour specification based upon you physical standard. Using a common pre-set colour space (like CIE L\*a\*b\*) on the device, take a measurement from your physical standard. This will provide a set of colour co-ordinates. Then set a "tolerance" from that standard (a CIE L\*a\*b\* Delta E of 1 is a good place to start).

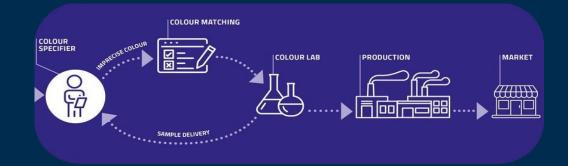
These colour co-ordinates and tolerance values can then be entered into a compatible colour measurement device anywhere in your supply chain, and checked against production samples.



## 5. AVOIDING REOCCURENCE

To prevent future colour problems, colour critical components should have specifications set and colour communication methods agreed during development.

If you need some help with this please let us know, our experts will be happy to support you.





#### IF YOU ARE HAVING COLOUR PROBLEMS CONTACT US

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