## Fortified colour stable Paprika

Due to paprika being used as a popular natural colorant, the pigments may sometimes be at risk of degradation through oxidation, and could be accelerated through intense processing methods, co-ingredients or even packaging. This can in turn impact a product or brand negatively whereby the consumer may perceive the product as lower quality than those with bright vibrant Colours.

Oxidation is the formation of peroxides within a product that allow an oxygen molecule to destabilise other molecular bonds. Once peroxides form, their prevalence accelerates and the whole product oxidises which not only leads to the symptom of colour fade, but also taste and rancidity issues.





#### The Plant-Ex solution:

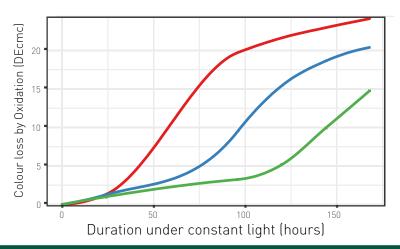
The Plant-Ex FPS (Food Protection System) team are dedicated to improving stability and shelf life. We have created a portfolio of fortified light stable paprika products which contain combinations of antioxidants capable of retarding peroxides and their growth rate.

## Case Study:

Below study demonstrates a standard Paprika Oleoresin compared with the same raw material with both a 1% and 2% inclusion of an FPS AO blend. Under accelerated UV light testing conditions where an hour of exposure is the equivalent of twelve hours of daylight, the AO protected oleoresins demonstrate a far higher level of stability, which means that both the colour and the rancidity of a product remain within acceptable boundaries for a greater period of time.

# PAPRIKA E160C WITH DIFFERENT LEVELS OF ANTIOXIDANTS OVER TIME

- Paprika E160c Oleoresin with 2% Antioxidant blend
- Paprika E160c Oleoresin
  Paprika E160c Oleoresin with 1% Antioxidant blend





Samples 4 days into study from left to right – Paprika Oleoresin E160c no antioxidant, Paprika Oleoresin E160c with 1% Antioxidant blend, Paprika Oleoresin E160c with 2% Antioxidant blend.



Samples 7 days into study from left to right – Paprika Oleoresin E160c no antioxidant, Paprika Oleoresin E160c with 1% Antioxidant blend, Paprika Oleoresin E160c with 2% Antioxidant blend.

### **Technical Support**

Talk to our team about the options available and our recommendations which would be given according to the application. Accelerated stability testing can also be undertaken in our laboratories to assist our partners.





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