

Recognised for innovation in the field of latent fingerprint detection & enhancement, foster+freeman are pleased to announce the launch of a novel new treatment...

# fpNATURAL 1

## IR FLUORESCENT FINGERPRINT POWDER



Despite the vast quantity of fingerprint treatments currently available, examiners continue to be frustrated by a number of 'difficult' substrates.

Multi-coloured and densely patterned backgrounds, reflective metal surfaces and substrates that fluoresce at the same wavelengths as common fingerprint treatments, can prevent the successful imaging of fingerprints.

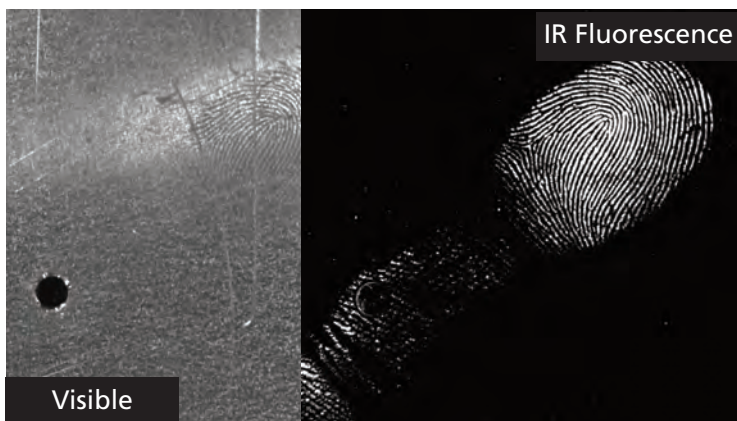
However, when dusted with fpNatural 1 IR fluorescent powder, interference can be removed to reveal high contrast prints.



Glossy gift wrapping paper



AUD \$5 Polymer banknote



Brushed Aluminium

### Study Reveals Excellent results

A preliminary study into the use of fpNatural 1 as a infrared fluorescent fingerprint treatment has recently been accepted for publication by the Forensic Science International Journal.

Results from the study, some of which are shown here, clearly demonstrate the effectiveness of fpNatural 1 at revealing fingerprints on a wide range of non-porous and semi-porous substrates.

For further information see:

Seeing into the infrared: A novel IR fluorescent fingerprint powder.  
Roberto S.P. King, Peter M. Hallett & Doug Foster

DOI: <http://dx.doi.org/10.1016/j.forsciint.2015.01.020>

# Inspired by NATURE



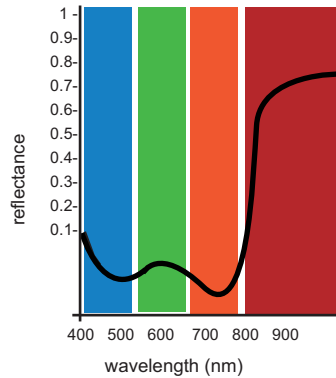
When seeking a material that would reflect IR, we took our inspiration from nature...

Plants absorb visible light as 'food' reflecting back all IR light that cannot be absorbed. Under intense illumination, pigments found in plant tissues, namely chlorophyll and anthocyanin, emit strong Near Infrared fluorescence.

Using these facts as our starting point we began testing plant-based powders for suitability.

Excellent results were achieved using a modified blend of cyanophyta, a phylum of bacteria that gains its name through its blue/green colour.

Often referred to as blue-green algae, there are approximately 2000 species of cyanophyta, the perfect blend of which meets all the requirements to produce an ideal IR fingerprint powder.



Typical light absorption of plants

## Benefits of a plant based fingerprint treatments

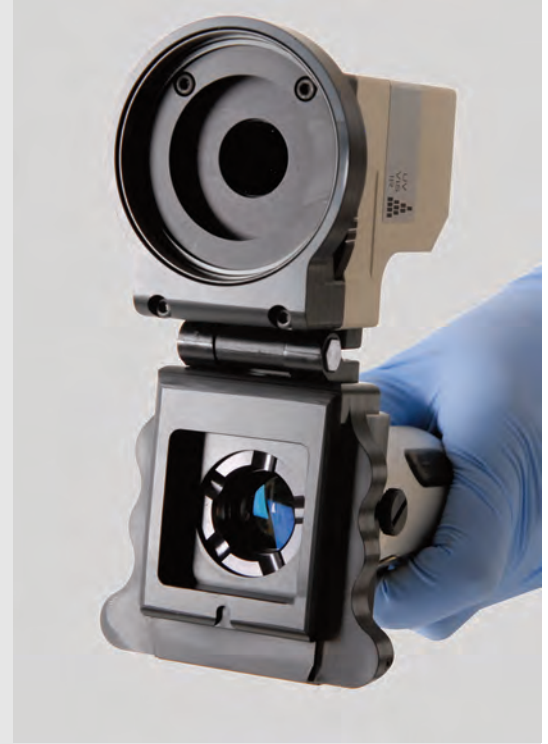
- + Rich in IR fluorescent phycocyanin and chlorophyll
- + Non-toxic, safe to use and handle
- + Once modified can be easily applied with a zephyr brush
- + Excellent results on many 'difficult' backgrounds

## fpNATURAL 1 ORDERING INFORMATION

### IR FINGERPRINT POWDER 20g

Order code QCL/257

- 20g pot of IR fingerprint powder
- homogenised mixture to optimised particle size
- MSDS materials data safety sheet
- application guide and imaging instructions



## Visualising fpNATURAL 1 Foster + Freemans range of IR-Ready Imaging Systems

### DCS 5

The world's most advanced digital fingerprint workstation

DCS 5 provides a complete solution to the examination of fingerprints, from capture, to enhancement to the presentation of court room evidence. Equipped with a custom-modified camera and a selection of UV-Vis-IR light sources, DCS 5 is the experts choice of fingerprint system.

### Crime-lite Imager

Semi-automated latent fingerprint capture and enhancement system

Combining advanced imaging and multi-wavelength illumination from UV to IR, the Crime-lite Imager enables operatives with varying degrees of expertise to consistently produce high quality results.

### Crime-lite Cam

UV-Vis-IR camera attachment for use with Foster + Freeman Crime-lites

Designed for crime scene or laboratory applications, Crime-lite Cam is a UV-Vis-IR sensitive digital camera attachment for use with Crime-lite forensic light sources. Captured images are viewed via a tablet or laptop PC.

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