

# NEATH PORT TALBOT COLLEGE COLEG CASTELL NEDD PORT TALBOT

## School of Maths & Science Science Practical

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### Powder Fingerprints

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#### ◆ Aim

*At the end of this experiment you should be able to:*

1. Use fingerprint powder to collect latent fingerprints from a range of different surfaces.
2. Compare the results and analyse the effects of different powders, surfaces and brushes.

#### ◆ Introduction

Fingerprint powder is usually in the 5 – 10 micron size range. When brushed over a latent print it will cling to the grease and moisture of the fingerprint ridges. Excess powder can be brushed away and the remaining print lifted using clear low-tack tape.

Fingerprint powder is useful and easy to use at crime scenes; however it can not be used on all surfaces. Porous or absorbent surfaces will be permanently marked and the quality of the print is poor. Fingerprint powder can also not be used on moist surfaces or on body fluids. The powders are available in a range of colours and a contrasting colour should be selected when possible.

#### ◆ Safety

##### Control Measures

- The wearing of safety **glasses** and a **laboratory coat** at all **times** will be sufficient to take account of most hazards and significant risks
- All waste is to be placed in the labeled container immediately after use
- You are reminded of the need of good laboratory practice in order to maintain a safe working environment.

##### Hazards

**Harmful! Irritant**

Fingerprint Powder



◆ **Procedure**

- Select an object (Glass, tin, plastic, wood or paper) and place a fingerprint/s on it.
- Select a fingerprint powder and a brush.
- Dust the area and lift the resulting print with clear tape.
- Place onto an acetate sheet and record all necessary information.
  - a) Initials of CS investigator
  - b) date
  - c) location or object
  - d) Type of powder used and
  - e) Type of brush used
  - f) Identification of primary characteristics of the fingerprint/s

Use the table below as a guideline of the prints.

Surface	Powder Type				
	Black	Black Mag	Aluminium	Pink	Green
Glass – Flat					
Glass – Curved					
Paper					
Plastic					
Tin					
Wood					
Gel lift					

## ◆ Conclusions

1. Produce a report showing your prints to their best advantage and include a discussion drawing conclusions about the powders, brushes and surfaces based on your results.

Hint: Lay out the acetate sheets on a coloured background for better effect.