Chromatography of sweets

This resource accompanies the article **Spoiling our Funfetti** in *Education in Chemistry* which can be viewed at: rsc.li/3lXqcI5

Equipment

Per group:

- Beaker, 250 cm^3
- Small soft paint brush
- Two paper clips (preferably plastic-coated)
- Chromatography paper, approximately 20 cm x 10 cm
- Pencil
- Ruler
- Communal hairdryer (optional)
- Supply of M&M's® of various colours
- Access to tap water in a beaker to use with the paint brush

Preparation

- You can supply the sweets on a spotting tile for stability. As an alternative to using a paint brush, learners can add three drops of water to each sweet on the spotting tile and transfer the coloured liquid to the chromatography paper using melting point tubes.

- Whatman® chromatography paper works best for this experiment but, if unavailable, large sheets of ordinary filter paper can be cut up instead.
- If M&M's® are unavailable, this experiment can be carried out with liquid food colourings or powdered food colourings dissolved in water (available from

scientific suppliers only). **Do not use gel food colouring.** Chromatography of Smarties® is less successful as they use natural food colourings.

Safety and hazards

Read our standard health and safety guidance and carry out a risk assessment before running any live practical. Teachers have a responsibility to carry out their own risk assessment.

Hazard classification may vary depending on supplier.

- Learners should wear safety glasses.
- Do not use Peanut M&M'S® due to the risk of allergic reaction from peanuts.
- Learners should not attempt to eat or lick the sweets which are for laboratory use only.
- Check packaging for any possible allergy or hazard if you are using a different type of sweets or food colouring.

Disposal

- Dispose of used chromatography paper and waste sweets with general waste.
- Wash and reuse melting point tubes (if used).
- Dispose of waste liquid food colouring suitable for food consumption (if used as an alternative) down the drain with plenty of water.