



SAFETY SHEET

Imaging Metal Corrosion – corrosion in pre-plated agar gels

Substance	Hazard	Comment
Pre-made phenolphthalein agar plates (white)		R22 Harmful if swallowed – Agar gel <i>Plates contain agar, NaCl and phenolphthalein indicator solution (0.5 mL per plate)</i> As a precaution: WASH HANDS AFTER HANDLING AGAR
Pre-made universal indicator agar plates (green/yellow)		R22 Harmful if swallowed – Agar gel <i>Plates contain agar, NaCl and universal indicator solution (0.5 mL per plate)</i> As a precaution: WASH HANDS AFTER HANDLING AGAR
Steel Nails	-	<i>Quite sharp</i>
Copper wire	-	<i>None</i>

Typical control measures to reduce risk

- Plates pre-made so that risk of irritation by the indicators is minimised
- Plates contain dilute indicators set in agar – minimal risk of inhalation/eye irritation, and not flammable
- Remind students to wash hands after touching agar

Assessing the risks

- What are the details of the activity to be undertaken? What are the hazards?
Students push nail into preplated agar.
- What is the chance of something going wrong? *Eg, Is there the possibility of theft or foolish behaviour?*
- How serious would it be if something did go wrong?
- How can the risk(s) be controlled for this activity? *Eg, Can it be done safely? Does the procedure need to be altered? Should goggles or safety spectacles be worn?*

Emergency action

- **In the eye** If agar contaminates the eye, flood with gently running tap water for 10 minutes.
- **Swallowed** If agar is ingested, do no more than wash mouth out and get medical advice
- **Spilt on the floor, bench, etc** Sweep up and dispose in a bin