

Program Risk Assessment

Title: Food Science	Authorized By:
	Page Number: 1 of 8

Risk Assessment prepared by: Liam Mudge, Meg Mitchell

Date of Assessment: 04/07/2024

Activity Type: Normal Program Activity

Reviewed by:

Date of Review:

Due for next review:

<p>Location of Activity:</p> <ul style="list-style-type: none"> Food and Fibre Lab K203 	<p>HAZARDS</p> <ul style="list-style-type: none"> Electrical Slips/trips/falls Temperature Chemical Biological Allergies Contamination Spoiled food stuffs 	<p>Control</p> <ul style="list-style-type: none"> Appropriate cleaning routines. Induction/Supervision Food Safe Standards PPE
<p>Description:</p>	<p>Food Science programs at the Ballarat Tech School tend to relate to different elements of taste testing, chocolate flavouring and making. Students create chocolate moulds and pouring their melted chocolate, setting it in the fridge. Programs which undertake Food Science based activities vary in their delivery. However, they all include a food safety brief, induction to the space and adherence to food safety standards as laid out in the BTS Food Science HIRAC.</p>	

Based on the Risk Assessment this activities level of risk is considered:

Medium

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Chemical Hazards

Are there any chemical hazards involved with this activity?

If YES, please answer the following form.

Chemical Hazard Controls

- I have consulted the Victorian Department of Educations [Guidance Sheet 3 Prohibited and Restricted Chemicals](#).
- Banned and restricted hazardous chemicals will not be used?
- No explosive reactants will be used or explosive products generated.
- I understand the risks of the practical experiment and will undertake this practical in a 'wet area'?
- I have obtained the safety data sheets for reactants and understand the accidental spillage or exposure, emergency response and first aid information?
- Quantities of flammable reactants are kept to minimum and ignition sources are eliminated?
- All hazardous chemicals and decanted products are labelled appropriately?

NO

NA

NA

NA

NA

NA

NA

NA

If you answer 'False' to any of the above questions, do not carry out practical experiments until the matter has been resolved.

- I will not carry out the practical experiment if extreme or high chemical risks exist.
- I have considered all chemical exposure routes of the eyes, skin, inhalation, ingestion and injection to be used and generated.
- I have located and linked all relevant MSDSs for Chemicals used in this activity.

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Biological Hazards

Are there any chemical hazards involved with this activity? If YES, please answer the following form.	Yes
Biological Hazard Controls	
<ul style="list-style-type: none"> Recommended banned and restricted hazardous biological agents will not be used? 	True
<ul style="list-style-type: none"> Biological agents used are recommended for the age group undertaking the practical experiment? 	True
<ul style="list-style-type: none"> I have obtained relevant safety data sheets for agents being used and understand the accidental spillage or exposure, emergency response and first aid information? 	True
<ul style="list-style-type: none"> All hazardous agents and mediums are labelled appropriately? 	True

If you answer 'False' to any of the above questions, do not carry out practical experiments until the matter has been resolved.

- I will not carry out the practical experiment if extreme or high biological risks exist.
- I have considered all chemical exposure routes of the eyes, skin, inhalation, ingestion, and injection to be used and generated.

List the biological agents to be used and generated.

Identify key hazard information from safety data sheets, control measures to be undertaken and disposal requirements.

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Risk Assessment Matrix

Assessing OHS Risks

Risk assessments in matters of Occupational Health and Safety* are based on 2 key factors:

- The severity of any injury/illness resulting from the hazard(s), and
- The likelihood that the injury/illness will actually occur.

**Assessment of risk level based on likely severity and probability of harm*

		LIKELIHOOD			
		Very Unlikely Could happen, but probably never will	Unlikely Could happen, but very rarely	Likely Could happen sometime	Very likely Could happen any time
SEVERITY	Death or permanent disability	MEDIUM	HIGH	EXTREME	EXTREME
	Long-term illness or serious injury	LOW	MEDIUM	HIGH	EXTREME
	Medical attention and short-term incapacity	VERY LOW	LOW	MEDIUM	HIGH
	First aid needed	VERY LOW	VERY LOW	LOW	MEDIUM

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EXPOSURE

Identify all groups who will be exposed to risks associated with this activity as well as any staff/specialist skills required to deliver this program e.g. Chocolate may require the assistance of some lab technician and personnel trained to operate the 3d printers/CNC machine.

- Program Staff
- Technical Staff
- Students
- Teachers

HAZARDS

- Electrical
- Slips/trips/falls
- Temperature
- Chemical
- Shear
- Biological
- other

STEM Educator Notes	Reviewer Notes
Food safety hazards involved with food science activities include: <ul style="list-style-type: none"> • Allergies • Contamination • Spoiled food stuffs • Appropriate cleaning routines. Students are instructed on proper hygiene techniques and requirements and provided with adequate handwash and cleaning facilities. Equipment and workspaces are regularly cleaned, and food is stored at safe temperatures.	

Based on the Risk Assessment Matrix, identify the level of hazard	Medium
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RISK CONTROLS

List major hazards identified and their control measures to be implemented.

Hazards	Control	Type	Notes
<ul style="list-style-type: none"> Electrical Slips/trips/falls Temperature Chemical Shear Biological Food Handling other 	<ul style="list-style-type: none"> Regular maintenance. Safe work zones/housekeeping. Induction/supervision Appropriate cleaning agents Use of appropriate oven mits/holders. Adherence to food safety procedures 	<ul style="list-style-type: none"> Administration Isolation PPE 	<ul style="list-style-type: none">

Notes: Students are verbally/visually instructed on safe and best practice for activities. The activity is demonstrated, students are then observed in completing procedure safely. All students are then supervised while conducting activities.

Based on the Risk Assessment this activities level of risk is considered.	VERY LOW
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Reference Documentation

List all reference documentation, HIRACs and MSDS forms applicable to this activity. If HIRAC does not already exist, the creation of a new HIRAC may be required.

HIRACs

- https://ballarattechschoo.vic.edu.au/sites/default/files/2024-06/BTS_HIRAC%20Food%20Science.pdf

Other Activity/Reference Material

- <https://www.foodstandards.gov.au/publications/safefoodaustralia>

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Activity Approval

This activity has been reviewed and determined that it can be carried out safely. Where risks have been identified appropriately mitigation measures will be implemented.

Completed By: Liam Mudge, Meg Mitchell

Date Completed: 04/07/2024

Reviewed by:

Date of next review: July 2025

Reviewed by supervisor, where high risks are involved.

4. Risk Assessment Signoff

Authorised By:	Signature:	Date:

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