Risk Assessment

Risk Assessment for the activity of	**Experimental PTV with LED illumination**	**Date**	**23/10/2023**
Unit/Faculty/Directorate	**Engineering**	**Assessor**	**Natalie Ko-Ferrigno**
Line Manager/Supervisor	***John Lawson***	**Signed off**	natalie

PART A											
(1) Risk identification			**(2) Risk assessment**				**(3) Risk management**				
Hazard	**Potential Consequences**	**Who might be harmed** **(user; those nearby; those in the vicinity; members of the public)**	**Inherent**			**Control measures (use the risk hierarchy)**	**Residual**			**Further controls (use the risk hierarchy)**
			Likelihood	**Impact**	**Score**		**Likelihood**	**Impact**	**Score**	
Cables presenting trip hazard	Falling resulting injury, head injury from large items in the lab	Anyone in the lab	**3**	**2**	**6**	**Ensure cables are at waist height or covered. Ensure they have high-visibility markings.**	**2**	**1**	**2**	Minimise use of trailing cables where possible
Slips, trips and falls from water on floor	Wrist injuries, bruising	Anyone on the lab	**3**	**2**	**6**	**Maintain a clean working environment**	**1**	**2**	**2**	

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Electronics near water	Shock Fire	Anyone in the lab	**2**	**3**	**6**	**Use low-voltage electronics to minimise the shock hazard** **Raise electronics to stay away from pooling** **Ensure PAT tested power supplies**	**1**	**3**	**3**	
Nylon powder	Respiratory irritation	Those nearby	**2**	**2**	**4**	**Only handle powder in areas of adequate ventilation**	**1**	**1**	**1**	
Nylon powder	Eye, skin and respiratory irritation	User	**3**	**2**	**6**	**Only handle powder with gloves and long sleeves** **Wash hands after handling** **Use at least FFP1 dust mask** **Wear safety glasses**	**2**	**1**	**2**	

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Assembly and disassembly of equipment	Cuts and bruises Electric shock	User, those nearby	**4**	**2**	**8**	**Ensure a clean working area** **Ensure electronic components do not have power when working on them**	**2**	**2**	**4**	

PART B – Action Plan

Risk Assessment Action Plan

Part no.	Action to be taken, incl. Cost	By whom	Target date	Review date	Outcome at review date
	Move large items out of walkways	Technician	29 Jan 2024		
	Ensure a mop is nearby and known so the spill can be cleaned	Natalie Ko-Ferrigno	29 Jan 2024		

Responsible manager's signature: Print name: Date:	Responsible manager's signature: Print name: Date

University of Southampton Health & Safety Risk Assessment

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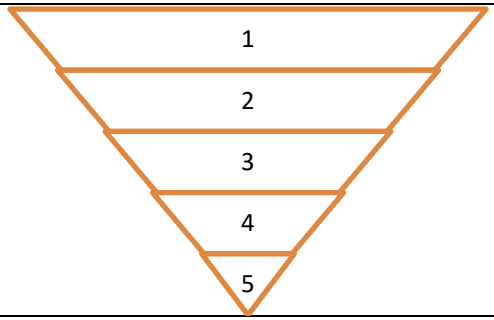
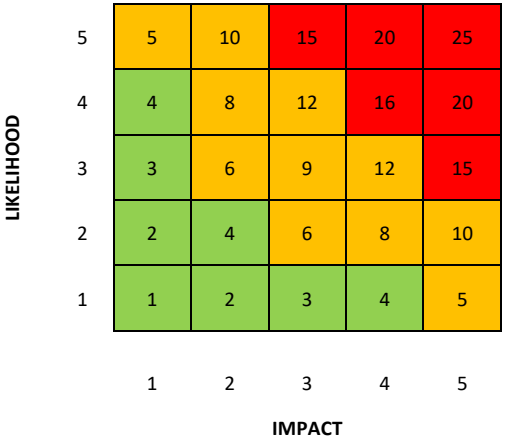
Assessment Guidance

1. Eliminate	Remove the hazard wherever possible which negates the need for further controls	If this is not possible then explain why
2. Substitute	Replace the hazard with one less hazardous	If not possible then explain why
3. Physical controls	Examples: enclosure, fume cupboard, glove box	Likely to still require admin controls as well
4. Admin controls	Examples: training, supervision, signage	
5. Personal protection	Examples: respirators, safety specs, gloves	Last resort as it only protects the individual





Risk process

1. Identify the impact and likelihood using the tables above.
2. Identify the risk rating by multiplying the Impact by the likelihood using the coloured matrix.
3. If the risk is amber or red – identify control measures to reduce the risk to as low as is reasonably practicable.
4. If the residual risk is green, additional controls are not necessary.
5. If the residual risk is amber the activity can continue but you must identify and implement further controls to reduce the risk to as low as reasonably practicable.
6. If the residual risk is red do not continue with the activity until additional controls have been implemented and the risk is reduced.
7. Control measures should follow the risk hierarchy, where appropriate as per the pyramid above.
8. The cost of implementing control measures can be taken into account but should be proportional to the risk i.e. a control to reduce low risk may not need to be carried out if the cost is high but a control to manage high risk means that even at high cost the control would be necessary.

Impact		Health & Safety
1	Trivial - insignificant	Very minor injuries e.g. slight bruising
2	Minor	Injuries or illness e.g. small cut or abrasion which require basic first aid treatment even in self-administered.
3	Moderate	Injuries or illness e.g. strain or sprain requiring first aid or medical support.
4	Major	Injuries or illness e.g. broken bone requiring medical support >24 hours and time off work >4 weeks.
5	Severe – extremely significant	Fatality or multiple serious injuries or illness requiring hospital admission or significant time off work.

Likelihood	
1	Rare e.g. 1 in 100,000 chance or higher
2	Unlikely e.g. 1 in 10,000 chance or higher
3	Possible e.g. 1 in 1,000 chance or higher
4	Likely e.g. 1 in 100 chance or higher
5	Very Likely e.g. 1 in 10 chance or higher