

WHS F029 Job Safety Analysis (JSA)

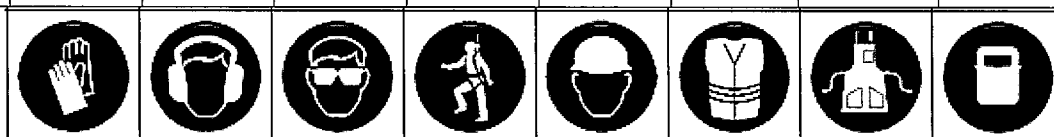
Title	Pratika S20 Benchtop stream Sterilizer		
School/Business Unit	Environmental and Rural Science	Location (building/lab/workshop if applicable)	W55 Chemical analysis laboratory Room 327

JSA Development Date	21/7/17	JSA Development Team	Paul Lisle
JSA Review Date	21/7/22		

Relevant Australian Standards / Codes of Practice / Legislation
• Australian Standard AS2182
Relevant Safety Data Sheets (can be obtained via UNE subscription to ChemWatch)
• NA
Plant & Equipment Required
• NA
Licenses Required
• NA
Competencies Required
• Laboratory Induction Training and Maintenance
PPE Required



	Dust Mask	Face Shield	Foot Protection	Hair Net	Protective Clothing	Respirator	Sun Protection	Breathing Apparatus
Compulsory			X					
As needed	X	X		X	X			



	Hand Protection	Hearing Protection	Safety Glasses	Safety Harness	Safety Helmet	Safety Vest	Apron/Lab Coat	Welding Mask
Compulsory	X		X				X	
As needed								

Additional PPE/Notes

Gloves must have long sleeves and capable of handling hot objects

Safety Inspection carried out each year by Qualified inspector and administered by FMS

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WHS F029	WHS OP006	1.1	14/09/2016	14/09/2019	1	29/09/2017

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Job Steps				
Job Step	Potential Hazards	Risk Score*	Controls	Residual Risk*
Before loading autoclave 1. Check distilled water container fill with RO water as needed. 2. Check dump tank(1) and empty if necessary	Water spill Empty contents down sink	4	Care, don't rush	3
3. check blue door seal and clean if necessary	Vacuum seal may cause 'Pressure Error' message	4	Engineering, Error message. Clean as per instruction sheet located near autoclave	3
4. Do not overload load autoclave	Not correctly sterilized	4	Error message if sterilization cycle is unsatisfactory Leave a reasonable gap for steam to penetrate contents	3
Select the correct cycle according to desired sterilization outcome Read manual located near the autoclave for detailed instructions	Not correctly sterilized	4	Error message if sterilization cycle is unsatisfactory Read manual located near autoclave to determine correct cycle	3
Do not attempt to open the door during the sterilization cycle or whilst the chamber is pressurised	Steam may escape and burn operator	8	Engineering, Door lock fitted will not operate if error message detected, safety Induction training and guidance	4
After cycle has finished indicated by display, do not to open door until pressure gauge has returned to zero Ensure that the cycle has completed and both temperature and pressure have returned to zero.	Steam may escape and burn operator	8	1. Engineering, Door lock fitted will not operate if error message detected, 2. Display will indicate cycle has finished and pressure gauge will read zero to indicate it's safe to open the door. 3. safety Induction training and guidance	4
When unloading Wear heat-insulating gloves, eye protection, lab coat, and closed-toe shoes. Ensure you have space to place the contents on a heat proof surface and other lab user keep a safe working distance	Hot objects may burn user or bystanders Surface maybe damaged by hot objects. Allow contents cool completely before handling without gloves.	6	Safety awareness, don't rush think before you act, use PPE	4


* The risk score and residual risk is determined by following steps 1-4 below.

STEP 1		STEP 2	
Determine likelihood of occurrence		Determine severity/consequence/cost	
Risk Score Calculator: Definition of Terms			
Rare	Likely to occur here only in very exceptional circumstances	Insignificant	No personal injury; and/or No adverse media attention; and/or Financial cost under \$2000
Unlikely	Could occur here at some time	Minor	Minor personal injury (first aid treatment); and/or Adverse Local Media Coverage; and/or Cost \$2000-\$50,000
Possible	May occur here at some time	Moderate	Serious personal injury (medical treatment); and/or Adverse Capital City Media Coverage; and/or Cost \$50,000-\$250,000

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Likely	Will probably occur here (has happened before)	Major	Serious Personal Injury/long term absence; and/or Adverse & Extended National media Coverage; and/or Cost \$250,000 - \$1m		
Almost Certain	Is expected to occur here in most circumstances	Catastrophic	Fatality(ies)/ long term impairment; and/or Government intervention; and/or Financial cost more than \$1million		
STEP 3: Determine Risk Score					
Risk Score Calculator: Matrix					
	Severity/Consequence/Cost				
Likelihood	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	2	3	4	5	6
Unlikely	3	4	5	6	7
Possible	4	5	6	7	8
Likely	5	6	7	8	9
Almost Certain	6	7	8	9	10
STEP 4: Determine Risk Score Response Priority					
Risk Score	Risk Score Response				
9-10	Severe risk. Highest of priorities. Must be rectified immediately.				
8	Very high risk. Requires urgent attention for quick resolution. Temporary controls to be implemented.				
6-7	Moderate to high risk. Prompt planning and resolution required with consultation.				
4-5	Low to moderate risk. Consult and identify controls that are reasonably practicable				
3	Very low risk. Minor issue for monitoring				
2	Insignificant Risk				
STEP 5: Implement the Highest Control Possible					
Hierarchy of Controls					
Eliminate the hazard					
Substitute the hazard with something safer					
Isolate the hazard from people					
Introduce engineering controls					
Implement administrative controls					
Use Personal Protective Equipment (PPE)					

Approval of JSA			
Name	FRANK LEAYR	Title	ERS Manager
Date	3/10/17	Signature	

Sign Off						
The University shall provide information and training to workers to enable them to perform tasks safely. This section is signed by workers (and supervisors) to indicate their understanding of the Job Safety Analysis and indicates their competence to complete the job in a safe manner as deemed by their supervisor. Workers should always consult with their supervisor where there is concern about the safety of a task that effects themselves or others.						
Date	Worker Name	Worker Signature	Supervisor Name	Supervisor Signature		
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Records Storage Instructions

All completed JSAs are to be recorded in TRIM Container A16/3851 utilising a TRIM license in your School/Business Unit. Only the HR Team is able to view records in this container. Completed JSAs are to be published on Safety Hub for ongoing utilisation.

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