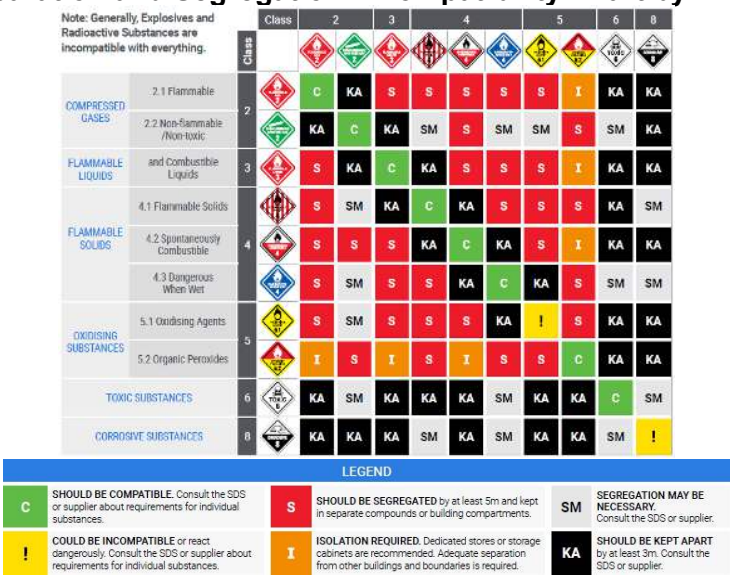
DANGEROUS GOODS (DG) and HAZARDOUS SUBSTANCES (HS) RISK ASSESSMENT	
Administration	Date Completed: 9/08/2024
Department/Work Area Location: MATH: [151] Monadelphous EECE Lab	Responsible Work Area Manager/ Supervisor Stuart Mather / Jega Gurusamy
People involved in completion of this Risk Assessment:	Name and Position:
Name of Dangerous Goods or Hazardous Substance:	Isopropyl Alcohol Cleaner
Equipment being used	Solder flux cleaner and general cleaning solvent

Determine Dangerous Goods (DG) and Hazardous Substances (HS) Hazard and Risk Factors					
Review SDS of DG / HS and answer the following questions:					
Question	**Yes/No**	**Class:**	**Packaging Group:**	**Quantity:**	**Unit of Measure:**
Is the substance classified as being Hazardous?	Yes	Choose an item.	Choose an item.	500	ml
Is the substance a Dangerous Good?	Yes	Class 3: Flammable liquids	Packing group II: Substances presenting medium danger		
Review SDS of DG / HS and document Risk and Safety Phrase:					
Risk Phrases Eg. Heating may cause explosion	R11 - Highly flammable R36 - Irritating to eyes R67 - Vapours may cause drowsiness and dizziness				
Safety Phrases Eg. Keep in cool place	S7 - Keep container tightly closed S16 - Keep away from sources of ignition – No smoking S24/25 - Avoid contact with skin and eyes S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S33 - Take precautionary measures against static discharges S51 - Use only in well-ventilated areas				

Separation and Segregation – Compatibility Chart by ADGC



Determine DG/HS Risk Factors: *Tick ☑ the below boxes to for all identified risks*

What form is the HS/DG in?

- ☒ Liquid
- ☐ Solid
- ☐ Gas/Odour
- ☐ Powder
- ☐ Other (Describe)

HS Hazards

Does the SDS make reference to any of the following HS hazards?

- ☐ Toxic
- ☐ Harmful
- ☐ Corrosive
- ☒ Irritant
- ☐ Poisonous
- ☐ Sensitiser (allergic reaction to skin)
- ☐ Carcinogenic
- ☐ Mutagenic
- ☐ Teratogenic (may cause birth defects)
- ☒ Other (Describe): Vapours may cause drowsiness and dizziness

DG Hazards

Does the SDS make reference to any of the following DG hazards?

- ☐ Acid ☐ Strong ☐ Weak
- ☐ Base ☐ Strong ☐ Weak
- ☐ Acid oxidiser
- ☐ Corrosive
- ☐ Dangerous when wet
- ☐ Explosive
- ☒ Highly flammable
- ☐ Organic peroxide
- ☐ Oxidising agent
- ☐ Spontaneously combustible
- ☐ Unstable
- ☐ Other (Describe):

Exposure Routes

Does the SDS make reference to any specific requirements managing possible exposure routes?

- ☒ Inhalation
- ☐ Ingestion
- ☐ Injection
- ☒ Skin
- ☒ Eye
- ☐ Other (Describe):

First Aid and Emergency

Does the SDS outline any specific first aid?

- ☐ Transfer immediately to doctor/hospital
- ☒ First aid supplies (eye wash, first aid kit etc.)
- ☐ First aid equipment required
- ☐ First aid training
- ☒ Call Poison Information Centre
- ☒ Do NOT induce vomiting
- ☒ Give water
- ☐ Medical emergency plan
- ☐ Evacuation plan
- ☐ Emergency Equipment
- ☐ Other (Describe):

Health Monitoring

Does the SDS refer to any specific health monitoring requirements in being exposed to the HS/DG?

- ☐ Health Surveillance
- ☐ Air Monitoring
- ☐ Other (Describe)

Handling and Usage

Does the SDS outline any specific requirements in handling/using the DG / HS

- ☒ Wear PPE
- ☒ Follow label instructions
- ☒ Avoid inhalation
- ☒ Avoid skin or eye contact
- ☒ Only use in well-ventilated areas
- ☒ Keep container sealed when not in use
- ☐ Maintain personal hygiene standards before and after use
- ☒ Keep away from ignition sources
- ☐ Training required before use
- ☐ Other (Describe):

Storage

Does the SDS refer to any specific safe storage requirements?

- ☒ Ensure Correct labelling
- ☒ Store in cool and dry area
- ☒ Store in ventilated area
- ☒ Protect from heat
- ☒ Protect from ignition sources or open flames
- ☒ Protect from sunlight
- ☐ Refrigerate or freeze at specified temperature
- ☒ Isolate/ Lock / Restrict Access
- ☒ Separation and Segregation

**See Compatibility Chart **

- ☐ Other (Describe):

Transport (DG Items Only)

Which Australian Dangerous Goods Code (ADG Code) requirements apply to this DG?

- ☐ Packaging requirements
- ☐ Use of bulk containers, IBCs, freight containers and unit loads
- ☐ Marking and placarding
- ☐ Vehicle requirements
- ☐ Segregation and stowage
- ☐ Transfer of bulk dangerous goods
- ☐ Safety equipment
- ☐ Procedures during transport emergencies
- ☐ Other (Describe):

Spill Management

Does the SDS make reference to any specific actions in managing HS/DG spills?

- ☒ Spills management kit and PPE items
- ☒ Isolate spill from water drainage systems
- ☒ Apply absorbent material
- ☐ Apply neutralising agent
- ☐ Dilute spill with water
- ☐ Report to environmental authority
- ☐ If safe to do so, stop gas flow to avoid explosion and fire.
- ☒ Spills management kit and PPE items
- ☐ Other (Describe):

Disposal

Does the SDS make reference to any specific actions in disposing of the HS/DG item?

- ☐ Dilute with Water:
- ☐ Dispose by domestic waste water system:
- ☒ Separate from waste
- ☒ Check local environmental laws
- ☒ Store for next chemical waste disposal collection
- ☐ Other (Describe):
- ☐ Empty cylinders to be returned to manufacturer/supplier
- ☒ Disposal by licensed disposal company
- ☒ Empty containers to be disposed of as per product

Other Risks

Can anyone be injured or suffer ill health from exposure to other hazards while using the HS/DG

- ☒ Manual handling
- ☐ Plant
- ☐ High Risk Work (HRW)
- ☐ Permit to Work
- ☐ Other (Describe):

**Note if risks related to manual handling, plant or HRW have been identified, please also consider completing a Risk Assessment, Permit to Work, Safe Work Method Statement (SWMS) templates etc

Comments – *Provide further comment on the risk factors identified:*

Risk Measures and Actions

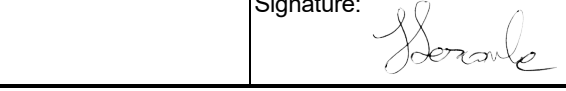
Where risks or hazards have been identified above complete the following listing all controls that will be undertaken to reduce the risk rating:

Refer to Assessment Matrix and Hierarchy of Controls document to determine risk ratings and the most appropriate controls

Add additional pages if required.

Hazard/Risk Identified in Section B	General Description of Hazard/Risk	Risk Rating Before Controls			Controls Implemented	Risk Rating After Controls		
		Likelihood	*Consequence*	*Risk Rating*	**More than one control may be required to effectively mitigate an identified hazard**	*Likelihood*	*Consequence*	*Risk Rating*
Highly flammable	The substance is highly flammable and can easily ignite if exposed to an ignition source such as sparks, open flames, or hot surfaces. This poses a significant fire and explosion risk, especially in environments with inadequate ventilation.	Possible	Major	Major (Ma2)	**Engineering Controls** – Only maximum of 500 ml is allowed in this lab at any time - Ensure adequate room ventilation (air-conditioning) is available **Administrative Controls** - Keep the liquid away from heat/ignition sources. -Training required before using solvent.	Unlikely	Major	Moderate (Mo5)
Irritating to eyes	The substance can cause irritation upon contact with the eyes leading to redness, and discomfort if not promptly washed out. Prolonged exposure without proper eye protection can exacerbate these effects.	Possible	Minor	Minor Mi3)	**Administrative Controls** - Provide training on the correct use of PPE and the importance of avoiding eye contact. **PPE** - Require the use of safety goggles or face shields when handling the substance.	Unlikely	Minor	Low (L5)
Vapours may cause drowsiness and dizziness	Inhalation of vapors from the substance can lead to drowsiness and dizziness which can lead to accidents or impaired decision-making.	Possible	Minor	Minor Mi3)	**Engineering Controls** - Ensure good ventilation in areas where the substance is used. **Administrative Controls** – Train users to use the solvent only in well ventilated areas.	Unlikely	Minor	Low (L5)

INDUCTEES DECLARATION		
I will comply with UWA's Safety and Health Policy and associated procedures and guidelines. I acknowledge receipt of this induction and have received the necessary information, instruction and training required to enable me to work safely.		
Name(s):	Signature(s):	Date:

PROJECT SUPERVISOR DECLARATION (if applicable)		
Name: Jega Gurusamy	Signature: 	Date: Click or tap to enter a date. 29/08/24
LAB SUPERVISOR DECLARATION		
Name: Stuart Mather	Signature: 	Date: Click or tap to enter a date. 29/08/24
HEAD OF SCHOOL AUTHORISATION		
Name: Tim Sercombe	Signature: 	Date: Click or tap to enter a date. 05/09/2024

Email completed and signed form to School Operations Engineering schoolops-eng@uwa.edu.au