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Responsible Safety

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COSHH Assessment Form [01]

Name of Substance:	ISOPROPANOL or Propan-2-ol (C_3H_8O)	Reference:	CAS No. 67-63-0	
1. Eliminating the hazardous substances: Is it possible to avoid the need to use the hazardous substance and safely dispose of existing quantities?			~~Yes~~	**No**
2. Substitution: Is it possible to use a less harmful substance to do the work?			~~Yes~~	**No**

Before beginning work on the COSHH assessment process ensure you have a copy of the latest Manufacturers Safety Data Sheet (MSDS) for the substance. MSDS's are available from suppliers and manufacturers of products.

		How long?	How often?	How much?
3. Describe the activity or work process. Note: Include how long the task will take, how often it will be repeated and how much of the substance is used .	**USING ISOPROPANOL TO CLEAN SAMPLE SURFACES BEFORE AND AFTER SOLDERING** Description of use: Isopropanol is used sparingly to wipe or clean sample surfaces. Process and exposure duration: A cotton bud is covered in a small amount of isopropanol and then used to wipe sample surfaces clean. This process is intermittent and has a duration less than one minute.	< 1 min	As and when required	< 50 mL

Location of work:	Laboratory fume cupboard. Laboratory benchtop when contained within a clearly labelled laboratory wash bottle.							
Persons at risk:	Employees	✓	Students	✓	Others	✓	Vulnerable persons	✘

Classification – Place an X in the box next to the appropriate sign.
For a fuller understanding of symbols, abbreviations, risk and safety phrases click on this link
http://www.hse.gov.uk/chemical-classification/labelling-packaging/index.htm

Irritant	X	Flammable		Oxidising	X
Toxic		Compressed Gas		Serious long term health hazard	
Corrosive		Explosive		Dangerous to the Environment	

First Aid	
Skin Contact:	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur
Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Obtain medical attention.
Inhalation:	Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.

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Indicate below which form the substance takes:															
Gas	✓	Vapour	✓	Mist		Fume		Dust		Liquid	✓	Solid		Other	

Indicate below which route(s) of exposure the substance takes:									
Inhalation	✓	Skin	✓	Eyes	✓	Ingestion	✓	Other	

Specific Hazards

Highly flammable. Serious eye damage or irritation. Can cause drowsiness or dizziness. Breathing difficulties. May cause central nervous system depression: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

Workplace Exposure Limits (WELs)

Long-term exposure level (8hrTWA):	Short-term exposure level (15mins):
400 ppm 999 mg/m^3	500 ppm 1250 mg/m^3

List the risks to health below from exposure to the substance click here information on hazard statements http://www.hse.gov.uk/chemical-classification/labelling-packaging/hazard-precautionary-statements-signal-words.htm

H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Control Measures: List below control measures e.g. extraction, ventilation, supervision, include additonal controls for vulnerable persons where necessary

1. Eyewash
2. Safety shower
3. Ventilation
4. Isolation or enclosure of the process being used wherever possible – **if it can be used within the fume cupboard, then do so**.

In the event of spillage, remove all forms of ignition, inform others and clear the room. Increase ventilation by opening windows. Use water to dilute and use sand to abosorb. Seek advice from Department Health and Safety Coordinator or someone senior to you.

Certain substances may react adversly if they come into contact with others, please list any compatibility warnings here:

Strong oxidizing agents. Acids. Halogens. Acid anhydrides

Is health surveillance or monitoring required? (remember health surveillance may be required for vulnerable persons e.g. pregnant/young workers those with asthma, dermatitis etc)	~~Yes~~ (refer to occupational health)	**No**

Personal Protective Equipment (identify type and specification)

 Dust mask	N/A	 Visor	N/A
 Respirator	Only if used with concentrations greater than the exposure limits (see above).	 Goggles	Should be worn to protect eyes from accidental splashing
 Gloves	**BT = Breakthrough Time** **Neoprene**: thickness 0.7 mm – BT <40 min **Butyl rubber**: thickness 0.5 mm – BT >480 min **Nitrile rubber**: thickness 0.35 to 0.55 mm – BT >360 to 480 min **Viton ®**: thickness 0.4 mm – BT >480 min	 Overalls	Only necessary if the user has areas of exposed skin, for instance, due to wearing a t-shirt.
 Footwear	Feet must be fully covered with shoes in case of spillage	 Other	N/A

Fire (identify appropriate fire extinguishers)									
Dry Powder	✓	CO2	✓	Water		Foam	✓	Fire Blanket	
During combustion substances may give rise to harmful vapours/gases etc please detail below:									
Carbon monoxide (CO), Carbon dioxide (CO2) and peroxides.									
Storage:									
Keep away from heat and sources of ignition. Flammables area. Keep container tightly closed in a dry and well-ventilated place.									
Disposal of waste substances & containers please indicate below (for advice contact 46042)									
Hazardous Waste	✓	General Waste		Biological Waste		Return to Supplier		Other	
If other please state:									

Risk Evaluation (using risk matrix)					
Uncontrolled risk level:		**CAUTION**		**Controlled risk level:**	**CARE**
Person(s) involved in COSHH assessment:		Dr. Mark J. Raine			
Date:	03/11/2026	**Signature:**	M. Raine	**Review date:**	03/11/2029

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RISK LEVEL		Likelihood of Occurrence			
		Very Unlikely Little or no chance of occurrence	**Unlikely** A rare combination of factors would be required for an incident to result.	**Possible** Not certain to happen but an additional factor may result in an accident	**Probable** More likely to occur than not
Hazard Severity	**Minor** No or minor injury (first aid)	**CARE**	**CARE**	**CARE**	**CAUTION**
	Moderate Off-site medical treatment or DAFW*	**CARE**	**CARE**	**CAUTION**	**ALERT**
	Serious More than one DAFW, long-term absence	**CARE**	**CAUTION**	**ALERT**	**STOP!**
	Major Permanent disability or harm, fatality	**CAUTION**	**ALERT**	**STOP!**	**STOP!**

***DAFW – Day Away From Work**

CARE	Minor harm possible, serious harm very unlikely to occur; implement controls and ensure care is taken when performing activity.
CAUTION	Minor harm probable, major harm unlikely to occur; follow all control measures, increased level of competence required and ongoing self-assessment of risks identified.
ALERT	Moderate degree of harm probable but major harm unlikely; critically assess the risks and appropriate controls. Specific competence required and ongoing assessment of risks by individual and/or supervisor.
STOP!	Serious or major harm will probably occur; stop the activity and critically assess the risks, review safety aspects of activity and implement further, appropriate controls. Consider referencing HSE or other Best Practice, consider involving HSS.