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Email:	d.t.reid@hw.ac.uk	Date Created:	16/05/2024 07:36:00
Assessment Reviewed	24/05/2024	Next Review	24/05/2029 15:43:00
Principal Investigator	S.Mansell	Authorised Date	24/05/2024 12:42:00
Principal Investigator	D.Ellis	Authorised Date	24/05/2024 15:43:00
Material Code:	408709	Tradename:	OPTIC CLEANING USING ACETONE AND IPA
		Supplier	HERIOT-WATT
Supplier Phone:		IMC:	
Keyword	Acetone	Frequency of use:	Daily
Approximately how much of the material is used by one person in one working day:	10 ml	How many people are directly exposed?:	1
Are any other people put at risk from indirect exposure?:	No	How are they exposed?:	breathing in vapour and skin contact and eye contact
Are there any susceptible workers?:	No	Susceptible Categories:	
Other info:		Is this material being used outside of the normal temperature range?:	No
Additional work practices:			
Existing Control measures:	safety specs and gloves in DBG29 solvent cabinet		
Exp Limit	2-Propanol 67-63-0 STEL 500 ppm 1,250 mg/m3 UK. EH40 WEL - Workplace Exposure Limits TWA 400 ppm 999 mg/m3 UK. EH40 WEL - Workplace Exposure Limits  acetone 67-64-1 TWA 500 ppm 1,210 mg/m3 Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values Remarks Indicative TWA 500 ppm 1,210 mg/m3 UK. EH40 WEL - Workplace Exposure Limits STEL 1,500 ppm 3,620 mg/m3 UK. EH40 WEL - Workplace Exposure Limits		

Notes

- 1. Use clearly labelled glass solvent containers.
- 2. Minimal quantities to be kept in the lab.
- 3. Main solvent storage in DB G29 in an approved metal cabinet.
- 4. Solvent quantity restricted to one small bottle per bench.
- 5. Do not place flammable material near beam path.
- 6. Avoid breathing vapours, mist or gas.
- 7. Remove all sources of ignition.
- 8. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
- 9. For very small spills wipe up with a blue roll or leave to evaporate.
- 10. Room DB G29 has a chemical spill mat, which should be used in case of a chemical spill.
- 11. If you have spilt a significant amount, evacuate all personnel (including you) to a safe area and shut off lab. You may have created a flammable atmosphere. Contact the School Safety Officer.

Files Uploaded

File Name

Activities

Act No	Method	Area	Exposure
1	Decanting	General Laboratory	Less than 5 minutes per shift
2	Cleaning Up (Spill)	General Laboratory	Less than 5 minutes per shift
3	Dispensing	General Laboratory	Less than 5 minutes per shift
4	Disposal	General Laboratory	Less than 5 minutes per shift

Work Area

Work Area Code	Sub Area Code
EPS	IPAQS DTR

Safer Substitute Chosen	Reason for leaving/swapping material
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Material/Process

OPTIC CLEANING USING ACETONE AND IPA

LOW HAZARD

LIQUID

SupplierHERIOT-WATT

KeywordAcetone

Contents

A: Acetone: < 2.5l, A: Propan-2-ol: < 2.5l

Signal Word

Exp Limit

2-Propanol 67-63-0 STEL 500 ppm  
1,250 mg/m3  
UK. EH40 WEL - Workplace



Health Hazards

H225: Highly flammable liquid and vapour.  
H319 - Causes serious eye irritation  
H336 May cause drowsiness or dizziness (referred to cleaning solvents: IPA and Acetone)

Considerations



MethodCleaning Up (Spill)AreaGeneral LaboratoryExposureLess than 5 minutes per shift

LOW ACUTE RISK - FULL EXPOSURE

LOW CHRONIC RISK - FULL EXPOSURE

LOW ACUTE RISK - INDIVIDUAL ACTIVITY

LOW CHRONIC RISK

Control Measures



Spillage

Less than 100ml -- use blue roll and dispose of in a well ventilated area. Above 100ml use spill kit, obtainable from EPS Perkin stores.

First Aid

If you require assistance pick up red phone OR dial extension 2222 (internal phone) OR safezone.  
First aid box in the corridor outside lab.

Fire

Trigger fire alarm and evacuate building. Call to 2222 or use safezone to alert security.  
If safe to do so, use an appropriate fire extinguisher in the corridor to extinguish the fire, e.g. foam, dry powder or carbon dioxide

Activity Comments

For small spills use blue roll to clean up the spill and leave the roll in a well ventilated area to safely evaporate. For large spills, obtain a spill kit from Perkin stores. Marigold gloves and eye protection to be worn.

Material/Process

OPTIC CLEANING USING ACETONE AND IPA

SupplierHERIOT-WATT  
KeywordAcetone  
Signal Word

LOW HAZARD

LIQUID



MethodCleaning Up (Spill)AreaGeneral LaboratoryExposureLess than 5 minutes per shift

LOW ACUTE RISK - FULL EXPOSURE

LOW CHRONIC RISK - FULL EXPOSURE

Control Measures

LOW ACUTE RISK - INDIVIDUAL ACTIVITY

LOW CHRONIC RISK

Activity Comments  
For small spills use blue roll to clean up the spill and leave the roll in a well ventillated area to safely evaporate.  
For large spills, obtain a spill kit from Perkin stores. Marigold gloves and eye protection to be worn.



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UK. EH40 WEL - Workplace



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Considerations



MethodDecanting

AreaGeneral Laboratory

ExposureLess than 5 minutes per shift

LOW ACUTE RISK - FULL EXPOSURE

LOW CHRONIC RISK - FULL EXPOSURE

LOW ACUTE RISK - INDIVIDUAL ACTIVITY

LOW CHRONIC RISK

Control Measures



Spillage

Less than 100ml -- use blue roll and dispose of in a well ventilated area. Above 100ml use spill kit, obtainable from EPS Perkin stores.

First Aid



If you require assistance pick up red phone OR dial extension 2222 (internal phone) OR safezone.  
First aid box in the corridor outside lab.

Fire

Trigger fire alarm and evacuate building. Call to 2222 or use safezone to alert security.  
If safe to do so, use an appropriate fire extinguisher in the corridor to extinguish the fire, e.g. foam, dry powder or carbon dioxide

Activity Comments

Use a funnel to decant up to 50 ml from the Winchester bottle into a 50 ml dropper bottle.  
Marigold gloves and eye protection to be worn.

Method	Decanting	Area	General Laboratory	Exposure	Less than 5 minutes per shift	Activity Comments
LOW ACUTE RISK - FULL EXPOSURE			LOW CHRONIC RISK - FULL EXPOSURE			Use a funnel to decant up to 50 ml from the Winchester bottle into a 50 ml dropper bottle. Marigold gloves and eye protection to be worn.
Control Measures		LOW ACUTE RISK - INDIVIDUAL ACTIVITY		LOW CHRONIC RISK		
						

Health Hazards

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Material/Process

OPTIC CLEANING USING ACETONE AND IPA

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Health Hazards

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H319 - Causes serious eye irritation  
H336 May cause drowsiness or dizziness (referred to cleaning solvents: IPA and Acetone)

Considerations

Method	Disposal	Area	General Laboratory	Exposure	Less than 5 minutes per shift
LOW ACUTE RISK - FULL EXPOSURE			LOW CHRONIC RISK - FULL EXPOSURE		
Control Measures		LOW ACUTE RISK - INDIVIDUAL ACTIVITY		LOW CHRONIC RISK	

Spillage

Less than 100ml -- use blue roll and dispose of in a well ventilated area. Above 100ml use spill kit, obtainable from EPS Perkin stores.

First Aid

If you require assistance pick up red phone OR dial extension 2222 (internal phone) OR safezone.  
First aid box in the corridor outside lab.

Fire

Trigger fire alarm and evacuate building. Call to 2222 or use safezone to alert security.  
If safe to do so, use an appropriate fire extinguisher in the corridor to extinguish the fire, e.g. foam, dry powder or carbon dioxide

Method	Disposal	Area	General Laboratory	Exposure	Less than 5 minutes per shift	Activity Comments
LOW ACUTE RISK - FULL EXPOSURE			LOW CHRONIC RISK - FULL EXPOSURE			Return all unused or contaminated solvent to Perkin stores for disposal. Use the Winchester bottle carrier for transporting the solvent.
Control Measures		LOW ACUTE RISK - INDIVIDUAL ACTIVITY		LOW CHRONIC RISK		

Health Hazards

H225: Highly flammable liquid and vapour.

H319 - Causes serious eye irritation

H336 May cause drowsiness or dizziness (referred to cleaning solvents: IPA and Acetone)

Material/Process

OPTIC CLEANING USING ACETONE AND IPA

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Health Hazards

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H336 May cause drowsiness or dizziness (referred to cleaning solvents: IPA and Acetone)

Considerations

Method	Dispensing	Area	General Laboratory	Exposure	Less than 5 minutes per shift
LOW ACUTE RISK - FULL EXPOSURE			LOW CHRONIC RISK - FULL EXPOSURE		
Control Measures		LOW ACUTE RISK - INDIVIDUAL ACTIVITY		LOW CHRONIC RISK	

Spillage

Less than 100ml -- use blue roll and dispose of in a well ventilated area. Above 100ml use spill kit, obtainable from EPS Perkin stores.

First Aid

If you require assistance pick up red phone OR dial extension 2222 (internal phone) OR safezone.  
First aid box in the corridor outside lab.

Fire

Trigger fire alarm and evacuate building. Call to 2222 or use safezone to alert security.  
If safe to do so, use an appropriate fire extinguisher in the corridor to extinguish the fire, e.g. foam, dry powder or carbon dioxide

Activity Comments

Use the dropper bottle to dispense one drop at a time onto lens tissue for cleaning the optic.

Method	Dispensing	Area	General Laboratory	Exposure	Less than 5 minutes per shift	Activity Comments
LOW ACUTE RISK - FULL EXPOSURE		LOW CHRONIC RISK - FULL EXPOSURE				Use the dropper bottle to dispense one drop at a time onto lens tissue for cleaning the optic.
Control Measures		LOW ACUTE RISK - INDIVIDUAL ACTIVITY		LOW CHRONIC RISK		

Health Hazards

H225: Highly flammable liquid and vapour.

H319 - Causes serious eye irritation

H336 May cause drowsiness or dizziness (referred to cleaning solvents: IPA and Acetone)

REQUEST DETAILS	#ID:	4955445	User making request	N/A
MATERIAL DETAILS	Material Code:	408709	LOW UNCONTROLLED ACUTE RISK  LOW UNCONTROLLED CHRONIC RISK  LOW CONTROLLED ACUTE/CHRONIC RISK	
Tradename:	OPTIC CLEANING USING ACETONE AND IPA			
IMC	Supplier	HERIOT-WATT		

Act No	Method	Area	Exposure
1	Decanting	General Laboratory	Less than 5 minutes per shift
2	Cleaning Up (Spill)	General Laboratory	Less than 5 minutes per shift
3	Dispensing	General Laboratory	Less than 5 minutes per shift
4	Disposal	General Laboratory	Less than 5 minutes per shift

SCENARIO DETAILS	Additional work practices:				
Approximately how much of the material is used by one person in one working day:	10 ml	Frequency of use:	Daily	How many people are directly exposed?:	1
Are any other people put at risk from indirect exposure?:	No				breathing in vapour and skin contact and eye contact
Are there any susceptible workers?:	No	Susceptible Categories:			
Next Review	24/05/2029				

Work Area Code	Sub Area Code
EPS	IPAQS DTR

- Other Information
1. Use clearly labelled glass solvent containers.
  2. Minimal quantities to be kept in the lab.
  3. Main solvent storage in DB G29 in an approved metal cabinet.
  4. Solvent quantity restricted to one small bottle per bench.
  5. Do not place flammable material near beam path.
  6. Avoid breathing vapours, mist or gas.
  7. Remove all sources of ignition.
  8. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
  9. For very small spills wipe up with a blue roll or leave to evaporate.
  10. Room DB G29 has a chemical spill mat, which should be used in case of a chemical spill.
  11. If you have spilt a significant amount, evacuate all personnel (including you) to a safe area and shut off lab. You may have created a flammable atmosphere. Contact the School Safety Officer.

Considerations	Answer
A Control Sheet has not been completed for the selected exposure scenario	

