

WORKING WITH HAZARDOUS SUBSTANCES



Author: Andy Lucas
 Issue Date: 21 April 2020
 Review Date: 21 April 2022

Version Control			
Version	Author/Changes	Changes	Dates
V1	A Lucas	Draft to be published	21 April 2020

Document title		
WORKING WITH HAZARDOUS SUBSTANCES		
Document authors and department	Responsible person and department	
Andy Lucas Safety Services	N/A	
Acknowledged by	Date of acknowledgement	
Health, Safety and Wellbeing Committee		
Review date	Edition no	ID code
21 April 2022	V1	SCoP 08
EITHER	OR	
For public access online (internet)?	For staff access only (intranet)?	
Yes	Yes	
For public access on request copy to be mailed	Password protected	
Yes	Yes	
<p>External queries relating to this document should be referred in the first instance to Safety Services : safety@worc.ac.uk</p>		

Table of Contents

1. POLICY STATEMENT.....	4
1.1 The Policy	4
2. BACKGROUND.....	5
2.1 What is COSHH?	5
2.2 Summary of Duties of the University Under COSHH	5
2.3 Substances Covered by COSHH.....	5
2.4 Substances Not Covered by COSHH	5
2.5 Workplace Exposure Level	6
2.6 5 Steps to COSHH Assessment.....	6
2.7 Hierarchy of Control	6
2.7.1 Elimination and Substitution	7
2.7.2 Engineering Controls	7
2.7.3 Administrative Controls.....	7
2.7.4 Personal Protective Equipment	7
2.8 Health and Medical Surveillance	8
3. LEGISLATION AND GUIDANCE.....	8
4. MANAGEMENT ARRANGEMENTS	9
4.1 Responsibilities for COSHH Assessment.....	9
4.2 Heads of Department (including academic, administrative and technical areas)	9
4.3 Staff (including academic and Technical)	9
4.4 Safety Services.....	9
5. COMPETENCE.....	9
5.1 Training.....	9
6. CONDUCTING YOUR COSHH ASSESSMENT	10
6.1 STEP 1 Gathering Information	10
6.2 STEP 2 Evaluate the risks to the health	10
6.3 STEP 3 Decide what action to take.....	10
6.4 STEP 4 Record the Assessment	11
6.5 STEP 5 Review and Update.....	11
7. APPENDIX 1 LEGISLATION and GUIDANCE.....	12
8. APPENDIX 2 SOURCES OF INFORMATION.....	13
9. APPENDIX 3 COSHH TEMPLATE.....	18

POLICY

1. POLICY STATEMENT

1.1 The Policy

This Safety Code of Practice sets out the operational arrangements to be followed in order to implement the [University Health and Safety Policy](#). In particular, the key principles of this policy are:

1. All measures will be taken so far as is reasonably practicable, to ensure compliance with the Control of Substances Hazardous to Health Regulations 2002
2. Where exposure to hazardous substances cannot be avoided, activities will be assessed to determine the level of risk and suitable control measures implemented
3. Staff will be provided with appropriate training, equipment and Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE) to ensure they can safely carry out all activities using hazardous substances
4. The University of Worcester will provide adequate resources to ensure that this SCoP can be fully implemented
5. Arrangements will be regularly reviewed to ensure that this SCoP remains fit for purpose

2. BACKGROUND

2.1 What is COSHH?

The [Control of Substances Hazardous to Health Regulations 2002](#) (COSHH), places a duty on the employer to not carry out any work liable to expose employees to any substance hazardous to health unless an assessment has been carried out. The employer's duty to control the risk of harm also extends to non-employees. Once the assessment has been carried out, exposure to hazardous substances is either prevented or controlled with reference to the [hierarchy of control](#). In essence, the COSHH Regulations aim to protect University staff, students and others from exposure to harmful substances and is based on risk assessment. COSHH applies to all University sites and therefore an assessment should be considered whenever there is a risk of exposure to harmful substances.

2.2 Summary of Duties of the University Under COSHH

- Carry out a suitable and sufficient assessment identifying hazardous substances, route of entry and ill health
- Where prevention of exposure is not reasonably practicable and harmful substances cannot be substituted by less harmful ones, effective control measures must be introduced to ensure exposure is below the [Work Exposure Level](#)
- Give consideration to staff with pre-existing conditions and carry out a specific assessment for expectant mothers
- Where identified in the COSHH assessment, implement a health surveillance programme
- Set out the necessary arrangements to manage emergencies and incidents
- Ensure relevant control measures are maintained in an efficient state and in a clean condition
- Have in place arrangements to manage the use and storage of suitable PPE/RPE
- Provide adequate training and instruction to staff and information to others where necessary

2.3 Substances Covered by COSHH

[Hazardous Substances](#)

A hazardous substance (including a preparation) includes any substance:

- described in safety information as very toxic, toxic, harmful, corrosive or irritant
- for which the Health and Safety Executive has approved a workplace exposure limit (a WEL) and is usually for substances which are inhaled
- which is a biological agent
- which is a dust of any kind, except dust which is a substance as above, when present at a concentration in air equal to or greater than:
 - i. 10mg/m³ as a time weighted average over an 8 hour period, of inhalable dust; or
 - ii. 4mg/m³ as a time weighted average over an 8 hour period, of respirable dust;
- which does not fall into any of the categories above but which when present or used in the workplace creates a risk to health (e.g. sensitising agents, welding/soldering fume etc.).

A [biological agent](#) is defined as a '*micro-organism, cell culture, or human endoparasite, whether or not genetically modified, which may cause infection, allergy, toxicity or otherwise create a hazard to human health*'

2.4 Substances Not Covered by COSHH

COSHH does not cover substances already covered by specific legislation e.g. lead and asbestos. Also, COSHH does not apply to substances and preparations that are hazardous only because of their physical properties:

- Hot, e.g. molten metals
- Cold, e.g. liquid nitrogen etc

- Flammable e.g. solvents (note solvents would be included if there is a risk of ingestion and inhalation etc.)
- Explosive
- Radioactive

2.5 Workplace Exposure Level

To harmonise assessment of airborne substances, a single limit has been introduced and these Workplace Exposure Limits (WELs) are listed in the HSE publication [EH40/2005 Workplace exposure limits](#). In practice, workers are exposed to a range of concentrations when working with hazardous substances and so the WEL relates to an average exposure over a reference period.

- Short Term Exposure Limit (STEL) combats ill health due to very high levels over a short period and is an average over 15 minutes
- Long Term Exposure Limit (LTEL) combats ill health due to relatively low levels over a lifetime and is an average over 8 hrs

Exposure is normally expressed in parts per million (ppm) or weight in volume of air (mg/m³). As part of the assessment, reference should be made to WELs where appropriate, because if control measures achieve exposure at levels of concentration below a WEL, this demonstrates compliance with COSHH.

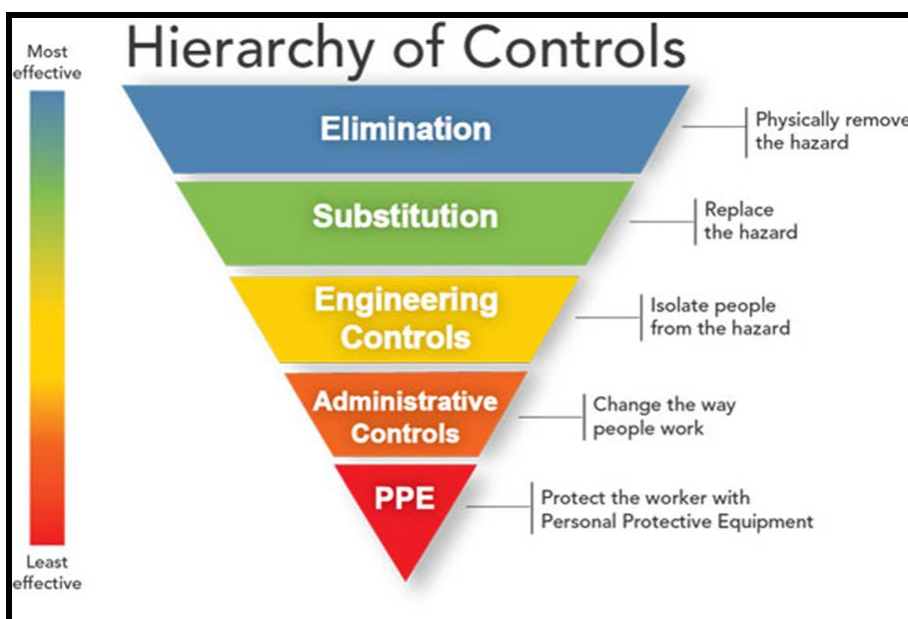
2.6 **5 Steps to COSHH Assessment**

There is nothing complicated about conducting a COSHH assessment and it should follow these 5 simple steps :

- STEP 1** Gather information
- STEP 2** Evaluate the risk
- STEP 3** Decide what action to take and identify control measures following the hierarchy of control
- STEP 4** Record the assessment
- STEP 5** Review the assessment and control arrangements

2.7 **Hierarchy of Control**

When controlling the risk of harm from hazardous substances, the following hierarchy of control needs to be considered in sequence, starting with elimination and substitution and using PPE as a very last resort. This hierarchy sets out the process that needs to be followed to ensure compliance with COSHH as follows.



2.7.1 Elimination and Substitution

Can the substance or process be eliminated from the activity? Can the activity be outsourced, or the hazardous activity be eliminated? For example, can you screw items together rather than being glued? can the state of the substance be altered i.e. use pellets rather than fine dust? Can a different product be used i.e. water based rather than solvent based or can the product be used in a diluted rather than concentrated form? Can you switch from a corrosive substance to an irritant? Can you get rid of stock that is not being used thus removing the hazard outright?

2.7.2 Engineering Controls

If you cannot control the risk by elimination or substitution, you then need to consider engineering controls or changing work practice. This can include changing the way we do things e.g. apply a solvent using a brush rather than a spray, or using a high performance vacuum rather than a broom to remove dust. You should also consider isolating the hazard from people. This can include enclosing the hazardous substance within process machinery or storage tanks. Transferring flour dust in pipework directly feeding into the enclosed mixing machines. If the route of exposure has been identified as being airborne, you need to consider ventilation as a control measure. This can either be at source i.e. local exhaust ventilation (LEV) or general dilution ventilation. This can include glove boxes, safety cabinets and fume boxes etc. in laboratories. On-tool extraction and extraction hoods can also be used in workshops to contain dusts, gases and vapours etc. If you are relying on ventilation, you must ensure it is properly maintained and inspected by a competent person. COSHH specifically states that all LEV is to be inspected at least every 14 months ([COSHH reg 9\(1\(a\)\)](#)) but it also needs to be subject to routine visual checks and planned preventive maintenance. The inspection and maintenance programme should be clearly set out and managed.

2.7.3 Administrative Controls

Administrative controls should only be considered having exhausted previous options. In reality, administrative control measures should be considered from the start and included in all control measures, running alongside other measures, but should not be considered the first option. Options include, but are not limited to:

- Documented safe system of work
- Limiting exposure time by changing working practice
- Alternating work activities
- Using alarms, warning signs and signals
- Provision of training and information
- Effective supervision
- Good practice and workplace hygiene to include:
 - a) Hand-washing when leaving a work room and before smoking or eating
 - b) Provision of adequate welfare facilities (soap, water and hand drying)
 - c) Good practice when removing PPE so as not to cross-contaminate hand and other clothing
 - d) Safe storage of PPE
 - e) Prohibit smoking, eating and drinking in the workplace

2.7.4 Personal Protective Equipment

Use of PPE is the last line of defence against harmful substances. This is because it provides protection ONLY to the individual and can have catastrophic consequences if it fails. Personal protective equipment including respiratory protective equipment needs to be properly selected for the purpose, stored, maintained and used by competent staff. PPE includes:

- Overalls, aprons gloves, boots and eye protection
- Respirators and breathing apparatus

For further details about PPE please refer to the following:

- [Personal Protective Equipment at Work Regulations 1992](#)
- [HSE Guidance on PPE](#)

2.8 Health and Medical Surveillance

Health and medical surveillance are systems of ongoing checks on workers exposed to hazardous substances. It can include monitoring, where workers are examined for signs/symptoms of a disease associated with exposure to work related substances, or biological monitoring, where samples of blood, urine or breath can be taken to look for signs of the harmful substance. COSHH specifies when surveillance should be undertaken and reference should be made to [COSHH Reg 11](#). The surveillance programme is identified as part of the COSHH assessment.

3. LEGISLATION AND GUIDANCE

The specific legislation covering managing the risk from hazardous substances is the Control of Substances Hazardous to Health Regulations 2002. They are made under the Health and Safety at Work etc. Act 1974 and place duties, mainly on the employer, to reduce the risk of exposure to hazardous substances. At the core of the regulations is a duty to assess risk, implement control measures and review. For further details about the relevant legislation and Guidance see [Appendix 1](#).

Organisational Arrangements and Responsibilities

4. MANAGEMENT ARRANGEMENTS

4.1 Responsibilities for COSHH Assessment

The University [Health and Safety Policy and Roles and Responsibilities](#) document sets out how health and safety is managed within the University, however the following sets out more specific roles and responsibilities relating to COSHH. It will be a matter for local management to decide who is responsible for actually carrying out a COSHH assessment. However, local arrangements need to be in place to ensure assessments are carried out by those competent to do so. The following sets out general responsibilities.

4.2 Heads of Department (including academic, administrative and technical areas)

The Head of School or Department is responsible for the following:

- implementing and promoting this SCoP at a local level
- ensuring staff fulfil their responsibilities as set out in this SCoP
- ensuring adequate resources are in place to implement this SCoP and that staff are competent
- arrange for checks to be carried out to ensure compliance with this SCoP
- setting out the arrangements locally to ensure compliance with this SCoP

4.3 Staff (including academic and Technical)

Staff, in particular Technicians, will have a key role in the COSHH assessment process. Staff will have to work together to ensure the health and safety of all those using, or exposed to hazardous substances. Staff who have been identified by the Head of School or Department, will be responsible for conducting COSHH assessments and implementing the control measures. Anyone handling or storing a substance covered by this SCoP will be responsible for ensuring they follow the control measures set out in any COSHH assessment. All staff will have a responsibility to raise any concerns they have with the handling, use and storage of all hazardous substances.

4.4 Safety Services

Responsible for reviewing and updating the SCoP when necessary. Provide support and advice to staff and periodically carry out audits to assess compliance with the SCoP and report findings.

5. COMPETENCE

5.1 Training

It is important that those engaged in conducting COSHH assessments are competent. There is no 'minimum' legal standard however, those carrying out a COSHH assessment must have the necessary skills, knowledge, training and experience depending on the complexity of the assessment. All staff working with hazardous substances should be familiar with the requirements of COSHH and have an understanding of the hazards associated with use of the hazardous substances that they are handling. As a minimum, all staff should review the COSHH element of the University [Health and Safety Induction](#) that provides a basic level of understanding.

Line managers should consider who is required to conduct a COSHH assessment and then consider their competence. University HR runs a COSHH assessment training session and all staff who are required to conduct assessments should be considered for this training. If further training is needed, this will depend

on the activity, the nature of the hazardous substance and the risk. The COSHH assessment should set out the level of training required but in most instances reference to the COSHH assessment and datasheet should be sufficient. It is the responsibility of Line Managers to ensure the competence of staff and to ensure training records are maintained.

6. CONDUCTING YOUR COSHH ASSESSMENT

6.1 STEP 1 Gathering Information

Identify all substances likely to be hazardous to health. Refer to the departments Chemical Register in the first instance. Walk around the site and consider all activities or observe the activity and record all hazardous substances.

Identify the hazards the substances have. Are they toxic, corrosive, carcinogenic etc.? What is their potential to cause harm? Acute or chronic effects? Minor injury or significant? Will harm be caused by short term or long term exposure or both? In what form will the substance take?

- Dusts (0.4um to 10 um). Are they respirable or inhalable?
- Gases (above their boiling point)
- Fibres
- Vapours (at or close to boiling point – solvents)
- Liquids
- Mists (suspended liquid droplets – paint spraying)
- Fumes e.g. generated during welding (small metallic particles < 1um)

What is the route of entry?

- Inhalation (via the nose and mouth) which is the most significant route of entry bypassing other defences like the liver
- Ingestion (via the mouth) into the stomach
- Through the skin including cuts, abrasions and eyes
- Injection (via a puncture by contaminated objects or a needle stick injury)

What quantity is being used, created and stored and what is the concentration of the substance? Is it used/stored neat, diluted and is it present in the air?

Determine who might be at risk of exposure, how are they exposed and for how long? Don't forget to include people who may not be handling the chemical, but may also be exposed to it, especially if it is airborne.

Are there any Workplace Exposure Limits (WELs) relevant to any of the substances identified?

To assist in this information gathering exercise, the following should be consulted:

- a) Product label
- b) Safety Data Sheet
- c) HSE publication [RISK ASSESSMENT40/2005 Workplace exposure limits](#)

Refer to [Appendix 2](#) for more detailed information.

6.2 STEP 2 Evaluate the risks to the health

In the next step you need to evaluate the risks workers are exposed to, or likely to be exposed to. This requires an assessment of the chances of exposure occurring, how often exposure might occur, what is the level of exposure and the duration.

6.3 STEP 3 Decide what action to take

In this step you need to consider the measures that are necessary to control or prevent exposure based on the information you have gathered. You need to consider:

- Implementing and managing the control measures following the hierarchy of control
- Provision of instruction and training on the risk and control measures
- Monitoring exposure
- Planning for emergencies
- Whether health surveillance is required

6.4 **STEP 4 Record the Assessment**

The complexity of the record will be dependent on the scope and breadth of the assessment. It should be in an agreed format and signed off by the person taking overall responsibility for the assessment. Staff should use the [COSHH template](#) in [Appendix 3](#)

6.5 **STEP 5 Review and Update**

The COSHH assessment needs to be reviewed and updated on a regular basis. Generally this would be following a change in process, changes in the substances being used, updated guidance on use of substances, following a significant event.

7. APPENDIX 1 LEGISLATION and GUIDANCE

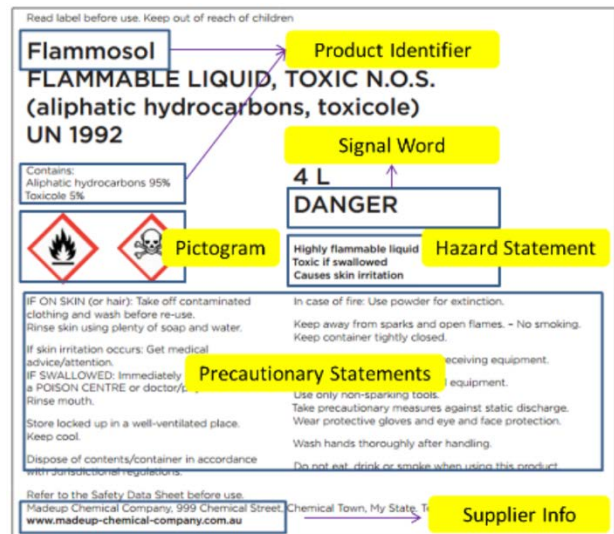
LEGISLATION	BRIEF DETAIL
Health and Safety at Work etc. Act 1974	Overarching legislation setting out duties for employers and employees. A breach of COSHH could result in action also being taken under the 'Act'
Management of Health and Safety at Work Regulations 1999	Regulations introducing the process of risk assessment. An employer would carry out a general risk assessment identifying the risk of exposure to hazardous substances. This would then prompt assessment and compliance with COSHH.
Control of Substances Hazardous to Health Regulations 2002 (as Amended)	Regulations requiring protection from the risk of exposure from the use, handling and storage of hazardous materials. Specifically sets out a framework of assessment and control of the risk of harm from hazardous substances.
Personal Protective Equipment at Work Regulations 1992	Regulations requiring assessment, provision and management of PPE whilst at work
GUIDANCE	REFERENCE
Control of Substances Hazardous to Health Regulations 2002 (as amended)	Legislation
Control of Substances Hazardous to Health Approved Code of Practice	L5 HSE Publication
A step by step guide to COSHH assessment	HSG97 Published by HSE
Working with substances hazardous to health	INDG136(rev5) Published by HSE
Control of substances hazardous to health (Sixth edition)	Published by HSE
EH40/2005 Workplace exposure limits	Published by HSE
Monitoring strategies for toxic substances	HSG 173 Published by HSE
COSHH	HSE web pages
COSHH Essentials	WHSE web page HSE examples of COSHH information sheets
Example COSHH risk assessments	HSE web pages
Controlling airborne contaminants at work A guide to local exhaust ventilation (LEV)	HSG258 HSE Publication
Local Exhaust Ventilation (LEV) workplace fume and dust extraction	HSE webpages

8. APPENDIX 2 SOURCES OF INFORMATION

Product Label

All commercial labels should contain the following information in the format of the Global Harmonising Standard (GHS). There are 6 elements to the label.

1. Product identifier
2. Hazard pictogram
3. Signal word
4. Supplier identity
5. Hazard statement
6. Precautionary statement



Commercially available hazardous substances will be labelled with one or more of the following pictograms:



In addition to the pictograms, labels also display a Hazard (H) or Precautionary (P) statement.

HAZARD Statements

- H200: Unstable explosive
- H201: Explosive; mass explosion hazard
- H202: Explosive; severe projection hazard

H203: Explosive; fire, blast or projection hazard
H204: Fire or projection hazard
H205: May mass explode in fire
H206: Fire, blast or projection hazard; increased risk of explosion if desensitizing agent is reduced
H207: Fire or projection hazard; increased risk of explosion if desensitizing agent is reduced
H208: Fire hazard; increased risk of explosion if desensitizing agent is reduced
H220: Extremely flammable gas
H221: Flammable gas
H222: Extremely flammable aerosol
H223: Flammable aerosol
H224: Extremely flammable liquid and vapour
H225: Highly flammable liquid and vapour
H226: Flammable liquid and vapour
H227: Combustible liquid
H228: Flammable solid
H229: Pressurized container: may burst if heated
H230: May react explosively even in the absence of air
H231: May react explosively even in the absence of air at elevated pressure and/or temperature
H232: May ignite spontaneously if exposed to air
H240: Heating may cause an explosion
H241: Heating may cause a fire or explosion
H242: Heating may cause a fire
H250: Catches fire spontaneously if exposed to air
H251: Self-heating; may catch fire
H252: Self-heating in large quantities; may catch fire
H260: In contact with water releases flammable gases which may ignite spontaneously
H261: In contact with water releases flammable gas
H270: May cause or intensify fire; oxidizer
H271: May cause fire or explosion; strong oxidizer
H272: May intensify fire; oxidizer
H280: Contains gas under pressure; may explode if heated
H281: Contains refrigerated gas; may cause cryogenic burns or injury
H290: May be corrosive to metals
H300: Fatal if swallowed
H301: Toxic if swallowed
H302: Harmful if swallowed
H303: May be harmful if swallowed
H304: May be fatal if swallowed and enters airways
H305: May be harmful if swallowed and enters airways
H310: Fatal in contact with skin
H311: Toxic in contact with skin
H312: Harmful in contact with skin
H313: May be harmful in contact with skin
H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H316: Causes mild skin irritation
H317: May cause an allergic skin reaction
H318: Causes serious eye damage
H319: Causes serious eye irritation
H320: Causes eye irritation
H330: Fatal if inhaled
H331: Toxic if inhaled
H332: Harmful if inhaled
H333: May be harmful if inhaled
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness

H340: May cause genetic defects
H341: Suspected of causing genetic defects
H350: May cause cancer
H351: Suspected of causing cancer
H360: May damage fertility or the unborn child
H361: Suspected of damaging fertility or the unborn child
H361d: Suspected of damaging the unborn child
H362: May cause harm to breast-fed children
H370: Causes damage to organs
H371: May cause damage to organs
H372: Causes damage to organs through prolonged or repeated exposure
H373: May cause damage to organs through prolonged or repeated exposure
H400: Very toxic to aquatic life
H401: Toxic to aquatic life
H402: Harmful to aquatic life
H410: Very toxic to aquatic life with long-lasting effects
H411: Toxic to aquatic life with long-lasting effects
H412: Harmful to aquatic life with long-lasting effects
H413: May cause long-lasting harmful effects to aquatic life
H420: Harms public health and the environment by destroying ozone in the upper atmosphere

PRECAUTIONARY Statements

General Actions

P101 If medical advice is needed, have product container or label to hand.
P102 Keep out of reach of children
P103 Read label before use

Preventative Measures

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat/sparks/open flames/hot surfaces. - no smoking
P211 Do not spray onto an open flame or other ignition source
P220 Keep/Store away from clothing/.../combustible materials
P221 Take any precaution to avoid mixing with combustible materials
P222 Do not allow contact with air
P223 Keep away from any possible contact with water because of violent reaction and possible flash fire.
P230 .Keep wetted with...
P231 Handle under inert gas
P232 Protect from moisture
P233 Keep container tightly closed
P234 Keep only in original container
P235 Keep cool
P240 Ground/bond container and receiving equipment
P241 Use explosion proof electrical/ventilation/lighting/.../equipment
P242 Use only non sparking tools

P243 Take precautionary measures against static discharge.
P244 Keep reduction valves free from grease and oil.
P250 Do not subject to grinding/shock/./friction.
P251 Pressurized container: Do not pierce or burn, even after use.
P260 Do not breathe dust/fumes/gas/mist/vapours/spray
P261 Avoid breathing dust/fumes/gas/mist/vapours/spray

- P262 Do not get in eyes, on skin, or on clothing
- P263 Avoid contact during pregnancy/while nursing
- P264 Wash..thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well ventilated area
- P272 Contaminated work clothing should not be allowed out of the workplace
- P273 Avoid release to the environment
- P280 Wear protective gloves/protective clothing/eye protection/face protection
- P281 Use personal protective equipment as required
- P282 Wear cold insulating gloves/face shield/eye protection
- P283 Wear fire/flame resistant/retardant clothing
- P285 .In case of inadequate ventilation wear respiratory protection

Emergency Response

- P301 If Swallowed:
- P302 If on skin:
- P303 If on skin (or hair):
- P304 If inhaled:
- P305 If in eyes:
- P307 If exposed
- P308 If exposed or concerned:
- P309 If exposed or you feel unwell

- P310 Immediately call a poison centre or doctor/physician
- P311 Call a poison centre or doctor/physician
- P312 Call a poison centre or doctor/physician if you feel unwell
- P313 Get medical advice/attention
- P314 Get medical advice/attention if you feel unwell
- P315 Get immediate medical advice/attention
- P320 Specific treatment is urgent (see...on this label)
- P321 Specific treatment (see ...on this label)
- P322 Specific measures (see..on this label)
- P330 Rinse mouth
- P333 If skin irritation or rash occurs:
- P334 Immerse in cool water/wrap in wet bandages
- P335 Brush off loose particles from skin
- P336 Thaw frosted parts with lukewarm water. Do not rub affected area
- P337 If eye irritation persists
- P338 Remove contact lenses, if present and easy to do. Continue rinsing
- P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P342 If experiencing respiratory symptoms:
- P350 Gently wash with plenty of soap and water
- P351 Rinse cautiously with water for several minutes
- P352 Wash with plenty of soap and water
- P353 Rinse with water/shower
- P360 Rinse immediately contaminate clothing and skin with plenty of water before removing clothing
- P361 Remove/Take off immediately all contaminated clothing
- P362 Take off contaminated clothing and wash before reuse
- P363 Wash contaminated clothing before reuse

- P370 In case of fire:
- P371 In case of major fire and large quantities:

- P372 Explosion risk in case of fire
- P374 Fight fire with normal precautions from a reasonable distance
- P375 Fight fire remotely due to risk of explosion
- P376 Stop leak if safe to do so
- P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
- P378 Use...for extinction.
- P380 Evacuate area
- P381 Eliminate all ignition sources if safe to do so
- P390 Absorb spillage to prevent material damage
- P391 Collect spillage

Storage Measures

- P401 Store...
- P402 Store in a dry place
- P403 Store in a well ventilated place
- P404 Store in a closed container
- P405 Store locked up
- P406 Store in corrosive resistant/.../container with a resistant liner
- P407 Maintain air gap between pallets
- P410 Protect from sunlight
- P411 Store at temperatures not exceeding..... °C
- P412 Do not expose to temperatures exceeding 50°C
- P413 Store bulk masses greater then ...kg at temperatures not exceeding ... °C
- P420 Store away from other materials
- P422 Store contents under.

Disposal Measures

- P501 Dispose of contents/container to ...

SAFETY DATA SHEETS











SDS 1 Identification of the substance/ mixture and of the company/ undertaking	SDS 2 Hazard identification	SDS 3 Composition/ information on ingredients	SDS 4 First aid measures
SDS 5 Firefighting measures	SDS 6 Accidental release measures	SDS 7 Handling and storage	SDS 8 Exposure controls/ personal protection
SDS 9 Physical and chemical properties	SDS 10 Stability and reactivity	SDS 11 Toxicological information	SDS 12 Ecological information
SDS 13 Disposal considerations	SDS 14 Transport information	SDS 15 Regulatory information	SDS 16 Other information

The old Material Safety Data Sheets have been replaced by the new Safety Data Sheets containing information arranged under 16 headings. When compiling your COSHH assessment you will need to obtain a copy from the suppliers who are under an obligation to make this information available. This will then provide the information to assist you in completing your COSHH assessment.

Graphic from the [European Chemical Agency](http://www.echa.europa.eu)

ChemSafety PRO

9. APPENDIX 3 COSHH TEMPLATE

Assessment Ref:		Name of Substance(s): (Attach manufacturers data sheet or make available online)					
Assessor's Details	Name			Dept.			
	Position			Assessment Date			
Activity/Procedure:				Storage Location			
Can the substance be eliminated/substituted				YES		NO	
Classification: PLEASE MARK ALL THAT APPLY							
 GHS02		Flammable	 GHS06		Toxic	 GHS07	Harmful / Irritant
 GHS04		Compressed Gas	 GHS01		Explosive	 GHS08	Carcinogen, mutagen, respiratory sensitizer
 GHS05		Corrosive	 GHS03		Oxidising	 GHS09	Environmental
	BIOHAZARDOUS INFECTIOUS MATERIALS						
Hazard Type: PLEASE MARK ALL THAT APPLY							
Gas:	Vapour:	Mist:	Fume:	Dust:	Liquid:	Solid:	Other:
Hazard & Precautionary Numbers							
Brief overview of risks from identified hazards:							
Route of Exposure: PLEASE TICK ALL THAT APPLY							
Inhalation:	Skin:	Eyes:	Ingestion:	Other:			
Workplace Exposure Limits (WEL's) please indicate n/a where not applicable							
Long-term exposure level (8hr TWA)				Short-term exposure level (15mins)			

People at Risk

Technician/Researcher	Contractor	Students	Visitor	Pregnant Worker	Staff (state below)
-----------------------	------------	----------	---------	-----------------	---------------------









STAFF/OTHER

Control measures: (for example extraction, ventilation, training & supervision) Include special measures for vulnerable groups such as disabled or pregnant workers.

Is health surveillance or monitoring required?
Yes/No

Details

Personal Protective Equipment (State type and Standard including RPE)

	Dust Mask			Visor	
	Respirator			Goggles	
	Gloves			Overalls	
	Footwear			Other	

Other

Any Specific Training Considerations?

Handling and Storage Arrangements:

Disposal Arrangements:

EMERGENCY PROCEDURES

First Aid measures/arrangements:

--

Spillage & Containment Arrangements

--

Specific Contact Details Relating to Use of Substance (where relevant)

UNIVERSITY CONTACT:

EXTERNAL CONTACT:

--

OVERALL RISK RATING (tick one box only)

HIGH	MEDIUM	LOW
CONTROLS INADEQUATE STOP WORK	RISK TOLERABLE FURTHER CONTROLS MAY BE REQUIRED	CONTROLS ADEQUATE

Have you received training in COSHH assessment

YES

NO

The above is to the best of my knowledge an accurate statement of hazards and foreseeable risks. The procedures and precautions described will adequately control exposure to substances hazardous to health.

Assessor (PRINT):

Date:

Signed:

Review date:

Signed to Acknowledge Receipt

NAME	SIGNED	DATE