



**FACULTY OF CHEMICAL ENGINEERING & TECHNOLOGY
(CHEMICAL DEPARTMENT)**

COSHH Risk Assessment

A Control of Substances Hazardous to Health (COSHH) risk assessment is required for work with hazardous substances including liquids, solids, fumes, dust, vapours, fibres, nano-particles, mists, gases and biological agents such as bacteria and viruses. The form should be completed electronically and approved and signed by the responsible person and authorized personnel. Please refer to hazardous chemicals to health listed in Schedule 1, Schedule 2 and 3 of Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health Regulations 2000, as well as Section 32 of Occupational Safety and Health Act 1994, Section 33 of Environmental Quality Act 1974 and Biosafety Act 2007.

Title of Research / Activity	
Assessor Name	
Department / Faculty	
Date of Assessment	
Laboratory Name(s)	

Section 1: Project or Activity

1.1: Brief description of project or activity

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Section 2: Hazards/Biohazards Identification

(Please refer to Safety Data Sheet or hazard signage)

No.	Item name	Name hazardous substance/ composition	CAS No	Physical Form	Pictogram	Hazard Category (High Severity)
1.						
2.						
3.						

Note: Hazard signage on chemical/biological or SDS (Pictogram) – Please remark with the number.

									
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.

Section 3: Risks Assessment

(Please refer to Safety Data Sheet/CSDS/MSDS or hazard signage)

Risks Index = Exposure Rating x Hazard Rating if accident or incident

No.	Item Name	Exposure Rating	Hazard Rating	Risks Index	Risk Level (Low/ Medium/ High)	Biosafety Level (For Biohazard items)
1.						
2.						
3.						

Note:

I) Exposure Rating Hazard Rating Risks Index & Risk Level

1 : one per year 1 : No hazard identify 1- 3 (Low)

2 : every month 2 : Irritant 4 - 8 (Medium)

3 : every week 3 : Harmful/ corrosive/flammable/explosive 9 – 16 (High)

4 : every day 4 : Very toxic/toxic/carcinogenic/teratogenic/mutagenic

II) Biosafety Level (BSL)

BSL 1 – Low risk to personnel and the environment

BSL 2 – Moderate risk to personnel and the environment

BSL 3 – Serious disease for human, animal or plant (not spread by casual contact)

BSL 4 – Very serious disease for human, animal or plant (often untreatable)

Section 4 : Controls/Treatment to Reduce Risks

4.1: Containment

Laboratory	Room	Controlled area	Total containment	Glove box	Fume cupboard	Local exhaust ventilation (LEV)	Access control	Other
☐	☐	☐	☐	☐	☐	☐	☐	☐

Select all that apply:

Remarks: (Details of control measures will be taken)

4.2: Other controls

Remarks: (Details of other control measures will be taken)

4.3: Storage of hazardous substances

Remarks:

4.4: Incompatible materials and condition to avoid

No.	Item Name	Incompatible Materials	Condition To Avoid
1.			
2.			
3.			

4.5: Personal protective equipment (PPE)

No.	Item Name	Required PPE
1.		
2.		
3.		

4.6: Waste management and disposal

Waste type (please tick):

Liquid ☐ Solid ☐ Gas ☐ Organic ☐ Aqueous ☐ Biomaterial ☐ Mixed ☐ Other ☐*Remarks : (Please specify the wastes code)**(Please refer to Laboratory Management for disposal the chemical/biological/scheduled waste or empty container)***4.7 Waste Pre-treatment if required**Disinfectant ☐ Autoclave ☐ Dilution ☐ Neutralization ☐ Other ☐ *Please specify:* _____

Section 5: Emergency Procedures

5.1: Emergency procedures

5.2: Spillage or release

Specify procedure

Other actions

Evacuate and secure laboratory / area

Yes ☐

Inform competent person (e.g. Laboratory Incharge/ school safety officer etc)

Yes ☐

5.3: Fire Precautions (*Extinguishing media*)

Carbon dioxide ☐ Water ☐ Powder ☐ Foam ☐ Blanket ☐ Automatic fire suppression ☐ Other ☐

5.4: First aid

No.	Item Name	First Aid Measures
1.		
2.		
3.		

5.5: Emergency Contacts

Name	Relation / Position	Contact Number
1.		
2.		
3.		

Section 6 : Approval**6.1: Assessor of Chemical Hazards/ Biohazards**

Name	Signature	Date
1.		

6.2: Main Supervisor / Responsible Person

Name	Signature & Stamp	Date
1. <i>(Supervisor/ responsible person)</i>		
2. <i>(Laboratory chief)</i>		
3. <i>(Laboratory Manager/ Assistant Laboratory Manager/Vocational Training Officer)</i>		