# Chemical risk assessment

The area of work which the risk assessment covers – e.g. research into organic polymers, training course no. xxxx, name of process, course, etc.

Date: \_\_\_\_\_

Completed by: \_\_\_\_\_

Director (signature): \_\_\_\_\_

Complete the form on the basis of your experience both of the work process/directions and of the relevant safety data sheets.

## DETAILS OF THE WORK PROCESS

Details can if desired be presented as a flow diagram of the process – i.e. broken down into logical sub-processes.

#### CHEMICALS

List the chemicals used.

#### HAZARDS FROM CHEMICALS

Include only the most hazardous substances – describe their hazardous properties and type of exposure– e.g. toxic if inhaled, carcinogenic when in contact with the skin and flammable. Give the quantities if they differ significantly from normal laboratory patterns.

## HAZARDS FROM THE WORK PROCESS

E.g. laser, vacuum, mixing of chemicals, other equipment – e.g. glass equipment under vacuum with risk of explosion.

#### **RISK OF EXPOSURE**

Assess the real risk in respect of the work process. The fact that the chemicals are dangerous if inhaled does not necessary mean that there is a risk of inhalation during this work process. Consider where in the work process the relevant risk resides: is it present throughout the process or only in a discrete sub-process.

#### SUBSTITUTION

Describe here what attempts and deliberations have been made as to the substitution of hazardous chemicals or work processes. Remember that using small rather than large amounts also counts as substitution.

NECESSARY SAFETY MEASURES	
Ventilation	Fume cupboard:
	Local exhaust:
	LAF bench:
	Other:
	Are the items listed necessary throughout the work process or only for certain procedures? Give details:
Chemical gloves	Which:
(Give approx. penetration time if possible)	Penetration time:
	Are the gloves necessary throughout the work process or only for certain procedures? Give details:
Other personal protective	
equipment	Overalls / protective clothing:
	Safety goggles:
	Breathing equipment (state filter):
	Special footwear (state type):
	Other:
	Are the items listed necessary throughout the work process or only for certain procedures? Give details:
Other safety precautions	
	Specific sources of heat in the event of risk of fire:
	Other:
Special emergency	
equipment:	Special fire-fighting equipment:
	Any antidotes:
	Other:

Special training or instruction:	Statutory training; specify: Instruction in the use of particularly dangerous equipment; specify:
	Other:
WHAT TO DO IN TH	HE EVENT OF AN ACCIDENT OR SPILLAGE

Detail steps to be taken in the event of **relevant** accidents, the clearing up and disposal of spillages, the procedure for information on accidents etc.

## WASTE

Instructions on labelling waste bins – which waste group, UN no., etc. – poss. brief details re subsequent delivery of waste to chemical waste collection point (name).

# PREGNANT AND BREASTFEEDING WOMEN

Is the work process/area safe for pregnant or breastfeeding women?

Yes: \_\_\_\_\_ reasons: \_\_\_\_\_

No: \_\_\_\_\_ reasons: \_\_\_\_\_

## **PROPOSAL(S) FOR IMPROVING SAFETY:**

This item is seen as input into a general Workplace Assessment for the institute/department.