

# Curriculum activity risk assessment

## Managing Hazardous Materials in ITD

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### Activity scope

This document relates to the use of Hazardous materials in Industrial Technology Design (ITD) curriculum activities.

This risk assessment refers to both the maintenance and operational processes involved in dealing with potentially hazardous materials encountered in ITD programs.

Maintenance processes in the management of hazardous materials involve:

- ordering and storage
- preparation
- labelling
- disposal.

Operational processes include:

- handling and distribution
- first aid
- disposal and cleaning.

Teachers/leaders:		
Activity description:		
Start date:	Finish date:	No of students (approx.):
Class groups:		Supervision ratio (approx.):

### Risk level

Materials commonly used in programs have been grouped in different levels according to their toxicity, corrosiveness and flammability.

The actual risk level will vary according to the specific circumstances of the activity and these **must** be considered when assessing the inherent risk level and planning the activity. As a starting point, ask the following questions:

- Which students will be involved?
- Where will the students be?
- What will the students be doing?
- Who will be leading the activity?
- What will the students be using?

Inherent risk level		Action required / approval	
<input type="checkbox"/>	Low	<p><i>Group A (low risk)</i> includes:</p> <ul style="list-style-type: none"> <li>materials that are non-toxic</li> <li>materials that have a low toxicity</li> <li>materials that are used in such a way that corrosiveness or combustibility is not significant in the activity.</li> </ul> <p><i>Group B (low risk)</i> includes:</p> <ul style="list-style-type: none"> <li>materials with a low to medium level of toxicity</li> <li>materials that are used in such a way that corrosiveness or combustibility is not a significant aspect of the activity.</li> </ul>	<input checked="" type="checkbox"/> Manage through regular planning processes.
<input type="checkbox"/>	Medium	<p><i>Group C (medium risk)</i> includes:</p> <ul style="list-style-type: none"> <li>materials with high levels of toxicity</li> <li>corrosive materials that are used in an active way (e.g. acids used for etching)</li> <li>highly flammable materials that are used actively within the course of classroom activity (e.g. lacquer thinners).</li> </ul>	<input checked="" type="checkbox"/> Record controls in your planning documents and/or complete this <i>Curriculum Activity Risk Assessment</i> . <input checked="" type="checkbox"/> Consider obtaining parental permission.
<input type="checkbox"/>	High	<p><i>Group D (high risk)</i> includes</p> <ul style="list-style-type: none"> <li>materials with a very high level of toxicity (e.g. known or suspected carcinogens). These materials need to be handled with extreme care, following strict management and safety guidelines.</li> </ul>	<input checked="" type="checkbox"/> A <i>Curriculum Activity Risk Assessment</i> must be completed. <input checked="" type="checkbox"/> Principal or delegated Deputy Principal or Head of Program (i.e. HOD, HOSES, HOC) to review and approve risk assessment. <input checked="" type="checkbox"/> Obtaining parental permission is recommended. <input checked="" type="checkbox"/> Once approved, activity details are to be entered into the <i>School Curriculum Activity Register</i> .

The risk level groupings were determined on the assumption of correct usage of the materials and on the assumption that no untypical mixing of materials occurs. A [list of commonly used materials](#) give their grouping and significant characteristics.

Listed below are the minimum recommendations for this type of activity. For any items ticked 'No', provide further information regarding the additional or alternate controls to be implemented for the safe conduct of the activity.

Minimum supervision
Adequate adult supervision is to be provided. In determining what is adequate, consider the number of students, their individual needs, and the nature of the activity. If an adult other than a registered teacher is engaged for instruction, a teacher should be present to take overall responsibility. <a href="#">Blue Card</a> requirements <b>must</b> be adhered to.
<input type="checkbox"/> Registered teacher with minimum qualifications as outlined below <b>OR</b> <input type="checkbox"/> An adult with minimum qualifications as outlined below, in the presence of a registered teacher
Further information:

## Minimum qualifications

*The qualifications listed in this section are minimums for each type of situation. Leaders are encouraged to seek training to raise their qualification level above the minimum listed.*

Current first aid qualifications including Cardio Pulmonary Resuscitation (CPR) or ready access to first aid facilities, including qualified personnel.

[Blue Card](#) requirements met

**Low** — *Group A (low risk)* includes:

- materials that are non-toxic
- materials that have a low toxicity
- materials that are used in such a way that corrosiveness or combustibility is not significant in the activity.

*Group B (low risk)* includes:

- materials with a low to medium level of toxicity
- materials that are used in such a way that corrosiveness or combustibility is not a significant aspect of the activity.

**For a registered teacher:**

knowledge of the activity and potential hazards

**OR**

**For a leader other than a registered teacher:**

*an adult with competence (demonstrated ability), if a teacher with experience is not available.*

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

**Medium** — *Group C (medium risk)* includes:

- materials with high levels of toxicity
- corrosive materials that are used in an active way (e.g. acids used for etching)
- highly flammable materials that are used actively within the course of classroom activity (e.g. lacquer thinners).

**For a registered teacher:**

competence (demonstrated ability/experience to undertake the activity) in the teaching of the use of hazardous materials

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

**OR**

**For a leader other than a registered teacher:**

an adult with expertise (formal qualifications).

**High** — *Group D (high risk)* includes materials with a very high level of toxicity (e.g. known or suspected carcinogens). These materials need to be handled with extreme care, following strict management and safety guidelines.

**For a registered teacher with qualifications in Industrial Technology Design (ITD):**

competence (demonstrated ability/experience to undertake the activity) in the teaching of the use of hazardous materials

**OR**

**For a leader other than a registered teacher:**

an adult with expertise (formal qualifications).

A teacher could demonstrate their competency through their:

- knowledge of the activity and the associated hazards and risks
- experience (i.e. previous involvement) in undertaking the activity
- demonstrated ability and/or expertise to undertake the activity
- possession of qualifications related to the activity.

Further information:

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
First aid kit suitable for hazardous materials being used.	<input type="checkbox"/>	<input type="checkbox"/>
Communication system: <input type="checkbox"/> phone-line at location <input type="checkbox"/> mobile phone <input type="checkbox"/> walkie talkies/UHF radio <input type="checkbox"/> student/adult messenger Other:		
Lockable storage	<input type="checkbox"/>	<input type="checkbox"/>
Storage should be reasonably secure from forced entry.	<input type="checkbox"/>	<input type="checkbox"/>
Storage should be well ventilated, either by fan forced or by natural means.	<input type="checkbox"/>	<input type="checkbox"/>
Storage should be sufficiently large so that movement is not likely to cause additional hazards.	<input type="checkbox"/>	<input type="checkbox"/>
Storage should be able to cater for the various classes of hazardous compounds, e.g. <ul style="list-style-type: none"> <li>• corrosive liquids (acids)</li> <li>• volatile materials</li> <li>• flammable materials</li> <li>• materials which are combustible when combined with highly toxic materials.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Suitable ventilation for the activity given the hazardous material used.	<input type="checkbox"/>	<input type="checkbox"/>
Stable work tables or benches of a suitable height for the students.	<input type="checkbox"/>	<input type="checkbox"/>
Adequate room for movement of persons involved so they do not cause an additional hazard.	<input type="checkbox"/>	<input type="checkbox"/>

Minimum equipment/facilities <i>If 'No' is ticked, provide further information.</i>	Yes	No
Safety zones established to ensure that students have an adequate work area that other students will not enter	<input type="checkbox"/>	<input type="checkbox"/>
Adequate shelving and other storage areas should be available to safely store non-toxic materials, e.g. non-toxic pigments and glues.	<input type="checkbox"/>	<input type="checkbox"/>
A fire extinguisher and fire blanket should be available.	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate personal protective equipment should be worn by all persons participating in activities in which hazardous materials (e.g. acids for etching) are used. The equipment should conform to Australian Standards.	<input type="checkbox"/>	<input type="checkbox"/>
Further information:		

## Hazards and suggested control measures

All persons engaging in this activity should:

- identify the hazards, including any additional hazards not mentioned here
- assess their significance
- manage the potential risks.

Listed below are indicative hazards/risks and suggested control measures. They are by no means exhaustive lists. After checking these, add details of any other identified hazards/risks and additional controls you intend to implement.

Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
<b>Breakages</b> <ul style="list-style-type: none"> <li>• Glass</li> <li>• Crockery</li> </ul>	<ul style="list-style-type: none"> <li>• Inspect equipment before use for cracks and damage.</li> <li>• Do not heat or cool materials quickly.</li> <li>• Ensure that appropriate clean-up equipment (broom, dustpan) is available.</li> <li>• Ensure that students wear appropriate footwear.</li> <li>• Handle materials and equipment carefully.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	
<b>Dust, gas or fumes</b> <ul style="list-style-type: none"> <li>• Inhalation</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that appropriate personal protective equipment (such as facemasks and breathing apparatus) is worn.</li> <li>• Ensure there is adequate ventilation.</li> </ul>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>	



Hazards/risks	Control measures	Yes	No	Implementation plan / Additional controls
	<p>educational benefits justify students using hazardous chemicals in high risk activities:</p> <ul style="list-style-type: none"> <li>○ substitution of low-risk materials for high-risk materials should be considered where possible</li> <li>○ a decision should be made on the smallest quantity to be used while still guaranteeing the viability of the process</li> <li>○ management processes should be established for handling, distribution and control</li> <li>○ procedures for containing spillages and decontamination should be established</li> <li>○ chemicals required for decontamination processes should be arranged in advance and placed near at hand.</li> </ul>			
<p><b>Manual handling</b></p> <ul style="list-style-type: none"> <li>• Lifting equipment</li> <li>• Manipulating/moving students</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake a risk management process in order to prevent or minimise the risk of injuries caused by manual tasks.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>• <b>Students</b></li> <li>• Special needs</li> <li>• High risk behaviours</li> <li>• Medical conditions</li> <li>• Student numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Obtain parental permission, including relevant medical information.</li> <li>• When students with medical conditions are involved, ensure that relevant medical/emergency plans and medications are readily available (Insulin, Ventolin, EpiPen, etc.)</li> <li>• Refer to Individual education plan/Educational adjustment plan/Behaviour management plan and other student documents.</li> <li>• Where necessary, obtain advice from relevant advisory visiting teachers or specialist teachers.</li> <li>• Ensure there is adequate adult supervision.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

## Additional control measures

These would relate to the specific student needs, location and conditions in which you are conducting your activity.

Hazards/risks	Control measures

Submitted by:

Date:

List the names of those who were involved in the preparation of this risk assessment.

## Approval

Approved as submitted

Approved with the following condition(s):

Not approved for the following reason(s):

By:

Designation:

Signed:

Date:

Once approved, activity details should be entered into the *School Curriculum Activity Register* by administrative staff.

Reference no.

<b>Monitor and review</b> <i>To be completed during and/or after the activity and/or at the completion of the series of activities.</i>	<b>Yes</b>	<b>No</b>
Are the control measures still effective?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been any changes?	<input type="checkbox"/>	<input type="checkbox"/>
Are further actions required?	<input type="checkbox"/>	<input type="checkbox"/>
Details:		

## Important links

- HLS-PR-003: First Aid  
<http://education.qld.gov.au/strategic/eppr/health/hlspr003/>
- HLS-PR-004: Infection Control and Management of Prescribed Contagious Conditions  
<http://education.qld.gov.au/strategic/eppr/health/hlspr004/>
- Infection Control Guideline:  
[http://education.qld.gov.au/health/pdfs/healthsafety/infection\\_control\\_guideline.pdf](http://education.qld.gov.au/health/pdfs/healthsafety/infection_control_guideline.pdf)
- HLS-PR-005: Health and Safety Incident Recording and Notification  
<http://education.qld.gov.au/strategic/eppr/health/hlspr005/>
- HRM-PR-010: Working with Children Check – Blue Cards  
<http://education.qld.gov.au/strategic/eppr/hr/hrmpr010/>
- HLS-PR-006: Managing Occupational Risks with Chemicals  
<http://education.qld.gov.au/strategic/eppr/health/hlspr006/hs16.pdf>
- Standard Operating Procedures for Education Queensland sites  
<http://education.qld.gov.au/health/safety/hazards/equip-resources.html#sop>
- Managing a Practical ITD Workspace  
<http://education.qld.gov.au/strategic/eppr/health/hlspr012/resources/pracitdworkspace.pdf>

### Further information

For further information on incorporating risk management strategies into curriculum activity planning refer to [HLS-PR-012 Managing Risks in Curriculum Activities](#) and the associated list of [Curriculum Activity Risk Assessment Guidelines](#). (See: <http://education.qld.gov.au/strategic/eppr/health/hlspr012/index1.html>)

For further support with risk management training and advice, contact trained staff in schools such as Workplace Health and Safety Officers (WHSOs) and Workplace Health and Safety Representatives (WHSRs), and regional staff such as Senior Health and Safety Consultants.