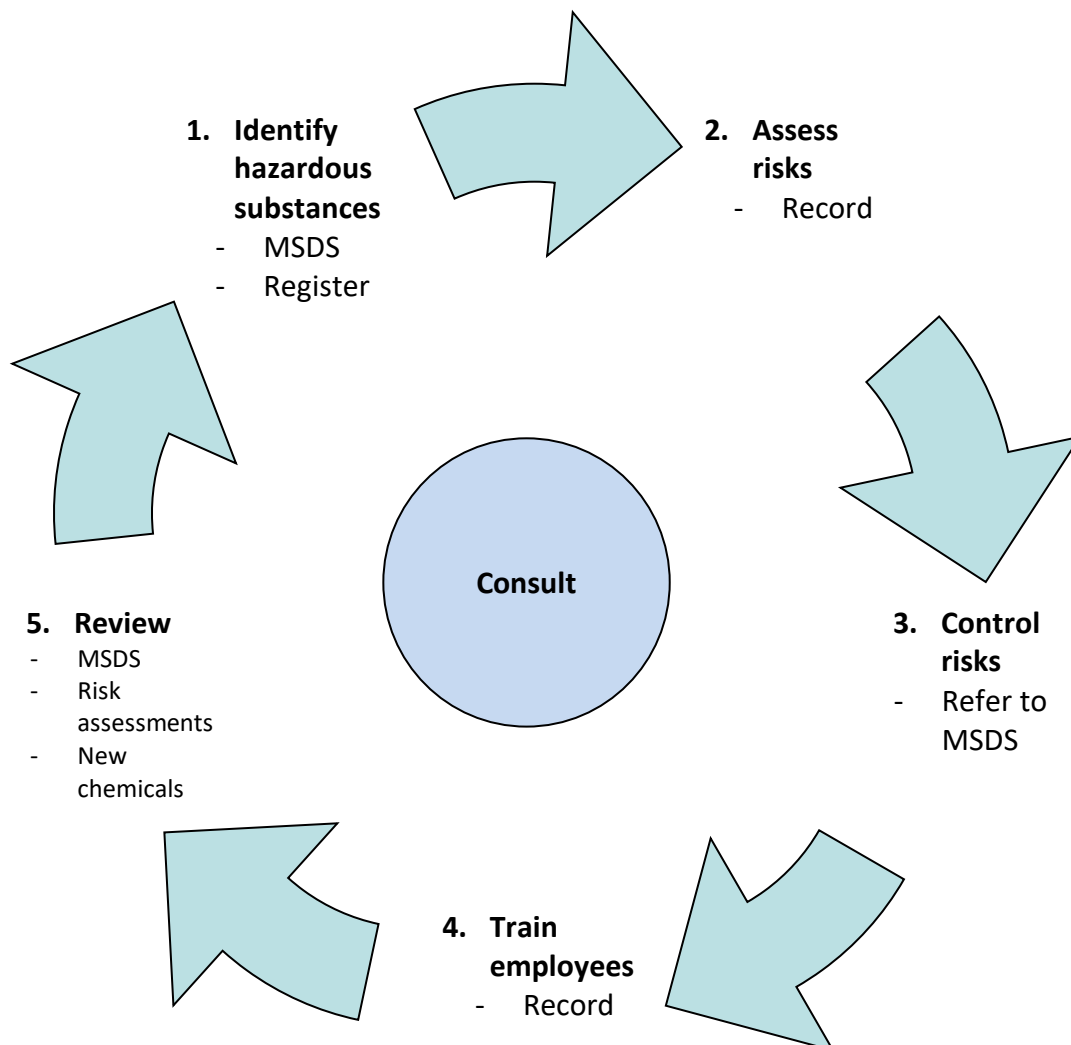




## Hazardous substances compliance tools



**Step 1: Identify hazardous substances**

- Walk through workplace, list all substances used or generated
- Obtain MSDS from manufacturer/importer (phone number on label) and check the MSDS to see if the substance is hazardous
- Check MSDS issue date is within last 5 years

**Create a hazardous substances Register** *(Reg. 5.13)*

- Place MSDS on file, and create an index for the file (index example and template over page)
- Keep register readily accessible to workers who use or may be exposed to the substances
- For non-hazardous substances, including MSDS on the register is optional

## Example

Hazardous Substances Register Index					
Company: XYZ Laboratories Pty Ltd		Date: 6/01/12			
Worksite: Perth Laboratory		Contact: J Bloggs			
Name of substance	Supplier <i>optional</i>	Hazardous Y/N	MSDS issue date*	Risk assessment  (Date & record of assessment outcome and assessor where risk is not significant OR reference to assessment report where risk is significant. Assessment record is optional for substances not classified as hazardous.)	
Bright Wash	Hunter Supplies	N	7/2010	Not required	
Ethylene oxide	BDH Chemicals	Y	9/2011	Assessed 01/10/11. Risk significant but controlled, see report RA1.	
Superclean whiteboard cleaner	AAA Chemicals	Y	1/2009	Assessed 6/11/10. Risk not significant due to small quantities held & used and method of application minimising skin contact – assessed by J. Bloggs.	
Sulfuric acid 98%	BDH Chemicals	Y	12/2011	Assessed 15/11/11. Risk significant and actions taken, see report RA2.	
Morning Fresh	Woolworths	N	2/2010	Not required	
Sodium bicarbonate	BDH Chemicals	N	6/2009	Not required	
Xylene	Merck	Y	1/2012	Assessed 06/01/12. Risk not significant due to small quantities used and controls in place (fumehood, fumehood maintenance program, PPE, PPE maintenance and replacement program, staff training) – assessed by J. Bloggs.	

\* MSDS must be less than five years from date of issue.

Registers may be in any format, however must contain at least the name of all hazardous substances used, the MSDS and a record of risk assessments.

A risk assessment report must also be prepared for any assessment which identifies a significant risk of injury or harm.

Version 4, 29.03.12

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<b>Hazardous Substances Register Index</b>					Ref:	Version
Company:		Date:				
Worksite:		Contact				
Name of substance	Supplier <i>optional</i>	Hazardous		MSDS issue date*	Risk assessment (Date & record of assessment outcome and assessor where risk is not significant OR reference to assessment report where risk is significant. Assessment record is optional for substances not classified as hazardous.)	
		Y	N			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			
		<input type="checkbox"/>	<input type="checkbox"/>			

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## Step 2: Assess the risks (Reg. 5.15)

1. Determine who will do the assessment and who will need to have input or be consulted.
2. Review MSDS, labels and any other hazard information.
3. Where substances have similar hazards and are used in a similar way, consider assessing them together (eg oil based paints).
4. Inspect work area and talk to staff to determine how the hazardous substances are really being used. In some cases technical assistance may be needed to establish exposure levels (eg air monitoring, or checking if ventilation systems work properly).
5. Compare how the substances are actually being used to the recommendations on the MSDS and determine whether any differences are presenting a risk to safety or health.
6. Identify any changes needed and determine how these will be implemented. Ensure the appropriate manager/s are responsible for implementation.
7. Document the risk assessment and determine when assessment should be repeated (when things change significantly, if problems are reported, or at least every 5 years). (Reg. 5.17)
8. You can use your own format to keep records, or use the form overleaf. A completed example is provided on page 7. (Reg. 5.16)

### Further assistance if required

- Refer to the *Guidance Note for the Assessment of Health Risks Arising from the use of Hazardous Substances in the Workplace [NOHSC: 3017 (1994)]*, (available at [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au) (search "NOHSC: 3017"))
- WorkSafe: Telephone 1300 307 877.
- Consult an occupational hygienist. The Australian Institute of Occupational Hygienists ([www.aioh.org.au](http://www.aioh.org.au)) or the Yellow Pages may provide listings.

Editable version online: [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au) → Safety topics → Hazardous substances  
→ Forms for hazardous substances → Hazardous Substances Risk Assessment Form

## Record of risk assessment for a hazardous substance

Refer to the *Guidance Note for the Assessment of Health Risks Arising from the use of Hazardous Substances in the Workplace* [NOHSC: 3017 (1994)], (available at [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)).

Hazardous substance:				How used:																																										
Location (used):				Quantities used (eg per shift):																																										
Frequency and duration of use:				Used by (occupation):																																										
<b>Nature of hazard <input checked="" type="checkbox"/>:</b> <input type="checkbox"/> Toxic <input type="checkbox"/> Harmful <input type="checkbox"/> Corrosive <input type="checkbox"/> Irritant <input type="checkbox"/> Sensitiser (may cause allergic-type skin or respiratory reaction) <input type="checkbox"/> Carcinogenic (may cause cancer) <input type="checkbox"/> Mutagenic (may cause mutations/genetic change) <input type="checkbox"/> Teratogenic (may cause birth defects) <input type="checkbox"/> Other hazard/s (specify):				<b>Possible route/s of exposure <input checked="" type="checkbox"/>:</b> <input type="checkbox"/> Eyes <input type="checkbox"/> Skin <input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion/ swallowing <input type="checkbox"/> Injection																																										
<b>Adequacy of current controls</b> <i>Current controls are inadequate if not present when MSDS requires them or if not functioning well. A 'no' under OK means action is needed. Consider each control – does the MSDS recommend it, and is it present?</i>				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 15%; text-align: center;">Present</th> <th style="width: 15%; text-align: center;">OK</th> </tr> </thead> <tbody> <tr> <td>Isolation</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Local extraction ventilation</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>General ventilation</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Natural ventilation</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Other engineering controls</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Safe work methods (eg pumping instead of pouring)</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Reduce quantity and/or concentration</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Information (at least MSDS and label)</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Ongoing training (hazards, safe use, PPE, health surveillance if applicable)</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td>Personal protective equipment (list):</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> <tr> <td colspan="3" style="padding: 5px;"><b>Other measures</b></td> </tr> <tr> <td>First aid supplies/equipment (eg safety shower)</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> <td style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No</td> </tr> </tbody> </table>					Present	OK	Isolation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Local extraction ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	General ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Natural ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other engineering controls	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Safe work methods (eg pumping instead of pouring)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Reduce quantity and/or concentration	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Information (at least MSDS and label)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Ongoing training (hazards, safe use, PPE, health surveillance if applicable)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Personal protective equipment (list):	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Other measures</b>			First aid supplies/equipment (eg safety shower)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Present	OK																																												
Isolation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
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General ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Natural ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Other engineering controls	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Safe work methods (eg pumping instead of pouring)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Reduce quantity and/or concentration	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Information (at least MSDS and label)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Ongoing training (hazards, safe use, PPE, health surveillance if applicable)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
Personal protective equipment (list):	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
<b>Other measures</b>																																														
First aid supplies/equipment (eg safety shower)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No																																												
<b>Monitoring</b>	Needed	Present	Results ok																																											
Health surveillance program	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	First aid training																																										
Air monitoring program	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Evacuation plan, emergency plan, and required emergency equipment																																										
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	Other controls (specify):																																										
<b>Conclusion: <input checked="" type="checkbox"/></b> <input type="checkbox"/> Risks not significant now and not likely to increase <input type="checkbox"/> Risks significant but effectively controlled at the moment <input type="checkbox"/> Risks significant and not adequately controlled at the moment <input type="checkbox"/> Uncertain about risks; more detailed assessment required																																														
<b>Action required to reduce risks:</b> <i>(list changes needed, by when and by whom, attach further pages if needed)</i> <input type="checkbox"/> Yes (specify): _____ Date completed: _____ <div style="text-align: right;">Signature: _____</div> <input type="checkbox"/> No																																														
Comments:																																														
Assessment carried out by:			Signature:		Date:																																									
Assessment approved by (person in charge):			Signature:		Date:																																									
Next assessment due:																																														

## Example: Record of risk assessment for a hazardous substance

Refer to the *Guidance Note for the Assessment of Health Risks Arising from the use of Hazardous Substances in the Workplace* [NOHSC: 3017 (1994)], (available at [www.safeworkaustralia.gov.au](http://www.safeworkaustralia.gov.au)).

<b>Hazardous substance:</b> <u>Hydrochloric acid, concentrated</u>				How used: <u>Used in laboratory work</u>	
Location (used): <u>Fume-hood in laboratory</u>				Quantities used (eg per shift): <u>200-500 mL/shift</u>	
Frequency and duration of use: <u>Used daily for 1-2 hours</u>				Used by (occupation): <u>Lab technicians</u>	
<b>Nature of hazard</b> <input checked="" type="checkbox"/> : <input type="checkbox"/> Toxic <input type="checkbox"/> Harmful <input checked="" type="checkbox"/> Corrosive <input type="checkbox"/> Irritant <input type="checkbox"/> Sensitiser (may cause allergic- type skin or respiratory reaction) <input type="checkbox"/> Carcinogenic (may cause cancer) <input type="checkbox"/> Mutagenic (may cause mutations/ genetic change) <input type="checkbox"/> Teratogenic (may cause birth defects) <input type="checkbox"/> Other hazard/s (specify):		<b>Possible route/s of exposure</b> <input checked="" type="checkbox"/> : <input checked="" type="checkbox"/> Eyes <input checked="" type="checkbox"/> Skin <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion/ swallowing <input type="checkbox"/> Injection		<b>Adequacy of current controls</b> Present <input checked="" type="checkbox"/> OK <input checked="" type="checkbox"/> <i>Current controls are inadequate if not present when MSDS requires them or if not functioning well. A <input checked="" type="checkbox"/> under OK means action is needed. Consider each control – does the MSDS recommend it, and is it present?.</i> Isolation <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Local extraction ventilation <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> General ventilation <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Natural ventilation <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Other engineering controls <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Safe work methods (eg pumping instead of pouring) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Reduce quantity and/or concentration <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Information (at least MSDS and label) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Ongoing training (hazards, safe use, PPE, health surveillance if applicable) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Personal protective equipment (list): <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <u>Safety glasses, lab coat, PVC gloves, closed shoes.</u>  <b>Other measures</b> First aid supplies/equipment (eg safety shower) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> First aid training <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Evacuation plan, emergency plan, and required emergency equipment <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Other controls (specify): <input type="checkbox"/> <input type="checkbox"/>	
<b>Monitoring</b>	Needed <input checked="" type="checkbox"/>	Present <input checked="" type="checkbox"/>	Results OK <input checked="" type="checkbox"/>		
Health surveillance program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Air monitoring program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
<b>Conclusion:</b> <input checked="" type="checkbox"/> <input type="checkbox"/> Risks not significant now and not likely to increase <input type="checkbox"/> Risks significant but effectively controlled at the moment <input checked="" type="checkbox"/> Risks significant and not adequately controlled at the moment <input type="checkbox"/> Uncertain about risks; more detailed assessment required					
<b>Action required to reduce risks:</b> (list changes needed, by when and by whom, attach further pages if needed) <input checked="" type="checkbox"/> Yes (specify): <u>Label in poor condition, to be replaced – J. Bloggs to action by 06/03/12.</u> Date completed: <u>No eye wash station, eye wash to be installed – J. Bloggs to action by 30/04/12. Prior to installation of fixed eye wash, eye wash bottle to be provided as interim measure – J. Bloggs to action by 03/03/09.</u> Signature: <input type="checkbox"/> No					
Comments:					
Assessment carried out by: <u>A.N. Assessor</u>			Signature: <u>A.N. Assessor</u>		Date: <u>27/02/12</u>
Assessment approved by (person in charge): <u>A. Boss</u>			Signature: <u>A. Boss</u>		Date: <u>27/02/12</u>
Next assessment due: <u>27/02/17 or earlier if conditions change</u>					

SAMPLE

**Step 3: Control the risks** (Reg. 5.20)

1. Ensure risks have been controlled as far as practicable.
2. Consider
  - a. Using a safer product (eg a non-hazardous product)
  - b. Using ventilation in the work area or next to the work
  - c. Using equipment to reduce potential contact with chemicals (eg pumping instead of decanting)
  - d. Using the chemical away from other work areas
  - e. Using safe work methods (eg implement procedures and permits for confined space work)
  - f. Selecting personal protective equipment (PPE) suited to the chemical and the work – refer to the MSDS or speak with an osh professional or safety equipment suppliers. Make sure you choose the correct type of gloves, respirators etc for the substance as other types may offer no protection.
3. Ensure controls are well maintained and working properly

**Step 4: Train employees** (Reg. 5.21)

1. Employees who use or may be exposed to hazardous substances need to have adequate information, instruction and training about the substances
2. Information and training must cover:
  - a. potential health risks and toxic effects of the hazardous substance;
  - b. control measures and how to use them;
  - c. care and use of personal protective equipment; and
  - d. if applicable, health surveillance required (eg blood lead tests)
3. Consider language barriers – information may need translation
4. Verbal explanations of the hazards, controls, care and use of PPE and health surveillance (if needed) should be provided
5. Records of training are required – see sample form overleaf

**NOTE:** Simply referring to a file of MSDS and asking an employee to review them is not training.

Editable version online: [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au) → Safety topics → Hazardous substances → Forms for hazardous substances → Hazardous Substances Training Form



## Hazardous substances training record

Ref:                      Version:

Name of employee

Date of training

Hazardous substance	
	<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"/>

Training included the:

- ☐ potential health risks and toxic effects of the hazardous substances in use;
- ☐ control measures and correct use;
- ☐ care and use of personal protective equipment; and
- ☐ if applicable, health surveillance

Name of manager/supervisor .....

Managers signature: .....

Employee signature: .....

Date: .....

Editable version online: [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au) → Safety topics → Hazardous substances → Forms for hazardous substances → Hazardous Substances Training Form

## Step 5: Review

1. Ensure MSDS are kept up to date – each MSDS should be issued less than 5 years ago – call the manufacturer/importer for an update if not (*Reg. 5.13 and 5.5*)
2. Risk assessments must be reviewed at least every 5 years – or earlier if problems arise or things change (*Reg. 5.17*)
3. New chemicals must be added to the register, assessed, controlled and staff trained (*Reg. 5.13, 5.15, 5.20, 5.21*)
4. Controls need to be reviewed regularly to ensure they are working properly – conduct workplace inspections, test ventilation systems, change filters in ventilations systems, inspect and maintain PPE (*Reg. 5.21*)

## Further information

### Legislation

- Occupational Safety and Health Act 1984
- Occupational Safety and Health Regulations 1996

### Codes of practice

- Spray painting

### Guidance notes

- Material Safety Data Sheets (MSDS)
- Assessment of Health Risks Arising from the use of Hazardous Substances in the Workplace [NOHSC: 3017 (1994)]

### Video

- Hazardous substances

WorkSafe website contains a wide selection of information on hazardous substances.  
[www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au)