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|  | Health & Safety  chemical risk assessment Form |

| Ra No.: | Date: | Version No.: | Review Date: | Authorised by: |
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| STEP 1 – ENTER INFORMATION ABOUT THE ACTIVITY/TASK, ITS LOCATION AND THE PEOPLE COMPLETING THE RISK ASSESSMENT |
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| Location name: | | Building No.: | Room No.: | | | Date: | Assessed by: | | HSR/Employee representative: |
| Chemical (Manufacturer’s name and product name): | | | | | Is the chemical a hazardous substance?  Yes  No | | | If “yes” list the hazard statement: | |
| Is the chemical a dangerous good?  Yes  No | If “yes” list the dangerous goods class: | | | | Is the chemical a scheduled poison?  Yes  No | | | If “yes” list the poison schedule: | |
| Description of work/activities/use: | | | | | | | | | |
| Are there any licencing/permit requirements?  Yes  No | If “yes” provide details: | | | | | Health surveillance requirements (list “nil” if not required): | | | A current MSDS/SDS is available  Yes |
| Exposure route of chemical:  Inhalation  Skin (absorption)  Eye  Ingestion  Injection  Other – Specify: | | | | | | | | | |
| Workplace conditions (Describe layout and physical conditions - including access and egress): | | | | | | | | | |
| What are the storage requirements? | | | | What are the waste/disposal requirements? | | | | | |

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| List systems of work for the activity/task:  ● Training ● Inspections  ● SOPs ● Existing controls  ● Emergency situations |  |
| Is there past experience with the chemical that may assist in the assessment?  ● Existing controls ● SOPs ● Standards  ● Industry standards ● Incidents & near-hits ● Legislation & Codes  ● Training ● Incident Investigation ● Guidance material |  |
| First aid and emergency requirements  ● Additional first aid kit contents ● Special first aid requirements (eg oxygen)  ● Emergency eyewash ● Emergency shower  ● Spill kit ● Neutralising agent ● Restrict access |  |

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| Step 2: Select a Risk Rating Method |

Two Variable Risk Matrix

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| (1) Definitions of likelihood labels | | | |
| Level | Likelihood (Probability) | | |
| Descriptor | Description | Expected to occur |
| A | Almost certain | The event will occur on an annual basis | Once a year or more |
| B | Likely | The event has occurred several times or more in your career | Once every three years |
| C | Possible | The event might occur once in your career | Once every 10 years |
| D | Unlikely | The event does occur somewhere from time to time | Once every 30 years |
| E | Rare | Heard of something like the event occurring elsewhere | Once every 100 years |

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| (2) Definitions of consequence labels | |
| Severity level | Consequences |
| V Catastrophe | One or more fatalities and/or severe irreversible disability to one or more people |
| IV Major | Extensive injury or impairment to one or more persons |
| III Moderate | Short term disability to one or more persons |
| II Insignificant | Medical treatment and/or lost injury time <2 weeks |
| I Negligible | First aid treatment or no treatment required |

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| (3) Risk rating matrix | | | | | |
| Likelihood  label | Consequence label | | | | |
| I | II | III | IV | V |
| A | Medium | High | High | Very high | Very high |
| B | Medium | Medium | High | High | Very high |
| C | Low | Medium | High | High | High |
| D | Low | Low | Medium | Medium | High |
| E | Low | Low | Medium | Medium | High |

Three Variable Risk Calculator

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| (1) Definitions of exposure variables | |
| Exposure | E |
| Continuously or many times daily | 10 |
| Frequently: Approximately once daily | 6 |
| Occasionally: Once a week to once a month | 3 |
| Infrequently: Once a month to once a year | 2 |
| Rarely: Has been known to occur | 1 |
| Very rarely: Not known to have occurred | 0.5 |

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| (2) Definitions of likelihood variables | |
| Likelihood | L |
| Almost certain: The most likely outcome if the event occurs | 10 |
| Likely: Not unusual, perhaps 50-50 chance | 6 |
| Unusual but possible: (e.g. 1 in 10) | 3 |
| Remotely possible: A possible coincidence (e.g. 1 in 100) | 1 |
| Conceivable: Has never happened in years of exposure, but possible (eg 1 in 1,000) | 0.5 |
| Practically impossible: Not to knowledge ever happened anywhere (e.g. 1 in 10,000) | 0. 1 |

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| (3) Definitions of consequence variables | |
| Consequences | C |
| Catastrophe: Multiple fatalities | 100 |
| Disaster: Fatality | 50 |
| Very serious: Permanent disability/ill health | 25 |
| Serious: Non-permanent injury or ill health | 15 |
| Important: Medical attention needed | 5 |
| Noticeable: Minor cuts and bruises or sickness | 1 |

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| (4) Risk score calculator | |
| Risk Score = E x L x C | |
| Risk score | Risk rating |
| > 600 | Very high |
| 300 - 599 | High |
| 90 - 299 | Medium |
| < 90 | Low |

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| STEP 3 – review chemical process | |
| For each stage of the chemical risk assessment:   * **Review the prompts/examples** for each route of exposure for each category; * Determine and record a **raw risk score** by referencing the two variable risk matrix or the three variable risk calculator; * In the **comments** box, describe the route of exposure and any other information (if applicable); * Specify the risk **control type** for each current or proposed risk control; * Provide a **control description** for each current or proposed risk control; * Where **proposed risk control(s)** have been identified complete a [**Health & Safety Action Plan**](file:///\\is-fs1b\propbuild\Environment%20Health%20and%20Safety\EHS%20MANUAL\EHSM%20Manager%20OHS%20Common%20Services\2015\Risk%20Assessments\safety.unimelb.edu.au\docs\health-and-safety-action-plan.docx); * Determine the **residual risk score** referencing the same two variable risk matrix or three variable risk calculator used to determine the raw risk score. | Hierarchy of Control (Control Type)  El – Elimination  S – Substitution  En – Engineering Is – Isolation G – Guarding  Sh – Shielding  A – Administrative T – Training In – Inspection  M – Monitoring H – Health Monitoring  P – PPE  For information devising appropriate controls, refer to: [Guide to Chemical Risk Hierarchy of Control](http://safety.unimelb.edu.au/docs/the_hierarchy_of_control_to_manage_chemical_risk_v1_0.pdf). |

| Category | Raw  Risk Score | Comments (when/where the exposure is present) | Control Type | Control Description (Current and Proposed) | Residual Risk Score |
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| Storage |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |
| Handling |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |
| **Decanting/Mixing** |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |
| **Applying/Using** |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |
| **Spill/Leak** |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |
| **Disposal** |  |  |  |  |  |
| ● Inhalation ● Skin (absorption  ● Eye ● Ingestion  ● Injection ● Other |

| STEP 4 – ImpleMEntation and consultation process | | | | |
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| Determine the person responsible for reviewing and implementing the risk assessment including the identified controls. Ensure a [**Health & Safety Action Plan**](file:///\\is-fs1b\propbuild\Environment%20Health%20and%20Safety\EHS%20MANUAL\EHSM%20Manager%20OHS%20Common%20Services\2015\Risk%20Assessments\safety.unimelb.edu.au\docs\health-and-safety-action-plan.docx) has been completed, reviewed and signed off where proposed controls have been identified.  Obtain the authorisation of the management representative.  Ensure the HSR (if applicable) has been consulted. Ensure the employees undertaking the activity have been consulted.  **Record below the names of the persons consulted.** | | | | |
| Research Group Leader |  | | HSR/Employee representative |  |
| Employee(s) |  | | Employee(s) |  |
| Employee(s) |  | | Employee(s) |  |
| Person Responsible for implementation or escalation | |  | | |

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| Extra writing room - use this page to enter extended comments or descriptions |
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For use in conjunction with the [OHS risk management procedure](https://policy.unimelb.edu.au/MPF1191) and the [Chemical risk management procedure](http://safety.unimelb.edu.au/publications/procedure/chemical/).

For further information, refer to <http://safety.unimelb.edu.au/tools/risk/> or contact your [Local Health & Safety contact](http://safety.unimelb.edu.au/about/contacts/local.html).