

# Chemical Handling Safety Checklist

ISO 45001:2018 · Occupational Health & Safety Management Systems

Scope: All areas where hazardous chemicals are stored, handled, or generated

Doc: CHEM-CHK-001 Rev.1

## Inspection Details

|                  |  |                     |                    |
|------------------|--|---------------------|--------------------|
| Organization     |  | Department / Area   |                    |
| Inspection Date  |  | Inspection No.      |                    |
| Inspector Name   |  | Inspector Signature |                    |
| Next Review Date |  | Document Ref.       | CHEM-CHK-001 Rev.1 |

### How to use this checklist

For each item, tick one box: Yes (compliant) · No (non-conformance) · N/A (not applicable). Record any observation or action reference number in the Notes column. Every 'No' response must have a corresponding entry in the Corrective Action Register. Each section is colour-coded for easy navigation. Retain completed checklists as documented evidence per ISO 45001 Clause 7.5.

| Ref.                                             | Requirement / Checklist Item                                                                                           | ISO 45001        | Status                                                                                                      |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>1. Chemical Inventory &amp; Documentation</b> |                                                                                                                        |                  |                                                                                                             |
| <b>1.1</b>                                       | A complete, up-to-date register of all hazardous substances on site is maintained.                                     | <i>Cl. 6.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>1.2</b>                                       | Safety Data Sheets (SDS/MSDS) are current (within 3 years) and physically accessible at each point of use.             | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>1.3</b>                                       | Each inventory entry includes: substance name, CAS number, supplier, quantity, storage location, and GHS hazard class. | <i>Cl. 7.5</i>   | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>1.4</b>                                       | A documented procedure governs procurement, receipt, and approval of new chemicals before first use.                   | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>1.5</b>                                       | Substitution of hazardous chemicals with less hazardous alternatives has been evaluated and documented.                | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                  | Requirement / Checklist Item                                                                                                            | ISO 45001        | Status                                                                                                      |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>2. Hazard Identification &amp; Risk Assessment</b> |                                                                                                                                         |                  |                                                                                                             |
| <b>2.1</b>                                            | Chemical hazard identification covers all substances stored, used, or generated on site — including reaction by-products.               | <i>Cl. 6.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>2.2</b>                                            | A documented risk assessment exists for every task involving hazardous chemicals.                                                       | <i>Cl. 6.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>2.3</b>                                            | The hierarchy of controls (Elimination → Substitution → Engineering → Administrative → PPE) is applied and recorded in each assessment. | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>2.4</b>                                            | Risk assessments are reviewed following incidents, near-misses, process changes, or at least annually.                                  | <i>Cl. 10.2</i>  | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>2.5</b>                                            | Specific written controls exist for carcinogens, mutagens, reproductive toxins (CMR substances), and sensitizers.                       | <i>Cl. 6.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>2.6</b>                                            | Chemical incompatibility and reaction hazards (exotherms, gas generation) have been identified and mitigated.                           | <i>Cl. 6.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                         | Requirement / Checklist Item                                                                                                 | ISO 45001        | Status                                                                                                      |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>3. Chemical Storage &amp; Segregation</b> |                                                                                                                              |                  |                                                                                                             |
| <b>3.1</b>                                   | Chemicals are stored in clearly labelled, designated areas with adequate ventilation and secondary containment (bundling).   | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.2</b>                                   | Incompatible chemicals are physically segregated in line with SDS recommendations and applicable regulations.                | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.3</b>                                   | Flammable/combustible liquids are kept in approved, grounded, and bonded containers within rated flammable storage cabinets. | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.4</b>                                   | Corrosive chemicals are stored below eye level and separated from incompatible materials.                                    | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.5</b>                                   | All containers carry GHS-compliant labels: substance name, hazard pictograms, signal word, and precautionary statements.     | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.6</b>                                   | Compressed gas cylinders are secured upright, valve-protected when not in use, and kept away from heat sources.              | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.7</b>                                   | Maximum permitted storage quantities are defined and posted; current quantities do not exceed these limits.                  | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>3.8</b>                                   | Outdoor storage is protected from extreme temperatures, UV degradation, and precipitation.                                   | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                         | Requirement / Checklist Item                                                                            | ISO 45001        | Status                                                                                                      |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>4. Safe Handling &amp; Use Procedures</b> |                                                                                                         |                  |                                                                                                             |
| <b>4.1</b>                                   | Written Safe Work Procedures (SWPs) or SOPs exist for all tasks involving hazardous chemicals.          | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>4.2</b>                                   | Each SOP clearly specifies: required PPE, engineering controls, emergency actions, and disposal method. | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>4.3</b>                                   | Eating, drinking, and smoking are prohibited — and enforced — in all chemical use and storage areas.    | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>4.4</b>                                   | Dedicated decanting/dispensing areas with spill containment and appropriate ventilation are provided.   | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>4.5</b>                                   | Quantities of chemicals used are minimized to the lowest amount required for each task.                 | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>4.6</b>                                   | Physical or administrative controls prevent unauthorized access to chemical storage and handling areas. | <i>Cl. 8.1.1</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                          | Requirement / Checklist Item                                                                                      | ISO 45001        | Status                                                                                                      |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>5. Personal Protective Equipment (PPE)</b> |                                                                                                                   |                  |                                                                                                             |
| <b>5.1</b>                                    | Required PPE for each chemical has been identified in the risk assessment and specified in the relevant SOP.      | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>5.2</b>                                    | Appropriate PPE (gloves, eye/face protection, respiratory protection, etc.) is provided to workers at no cost.    | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>5.3</b>                                    | PPE is regularly inspected, maintained, and replaced in line with manufacturer guidance and SDS requirements.     | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>5.4</b>                                    | Workers are trained in the correct selection, donning, doffing, use, storage, and limitations of required PPE.    | <i>Cl. 7.2</i>   | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>5.5</b>                                    | Respiratory protective equipment (RPE) is individually face-fit tested; workers using RPE are medically assessed. | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                             | Requirement / Checklist Item                                                                                             | ISO 45001        | Status                                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>6. Engineering Controls &amp; Ventilation</b> |                                                                                                                          |                  |                                                                                                             |
| <b>6.1</b>                                       | Local exhaust ventilation (LEV) is installed wherever chemical vapors, dusts, or fumes may be generated.                 | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>6.2</b>                                       | LEV systems are inspected, performance-tested, and maintained at defined intervals; records are retained.                | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>6.3</b>                                       | General workplace ventilation is sufficient to prevent the buildup of hazardous atmospheres.                             | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>6.4</b>                                       | Eyewash stations and emergency safety showers are reachable within 10 seconds and are tested weekly with records kept.   | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>6.5</b>                                       | Fixed gas detection or continuous air-monitoring is installed where flammable or toxic gas release is credible.          | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>6.6</b>                                       | The effectiveness of engineering controls is verified through occupational hygiene monitoring or equivalent measurement. | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                             | Requirement / Checklist Item                                                                                                            | ISO 45001 | Status                                                                                                                 |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------|
| <b>7. Information, Training &amp; Competency (Cl. 7.2 / 7.3)</b> |                                                                                                                                         |           |                                                                                                                        |
| <b>7.1</b>                                                       | All workers who handle or may be exposed to hazardous chemicals have received documented chemical safety training before starting work. | Cl. 7.2   | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>7.2</b>                                                       | Training covers: SDS interpretation, GHS labelling, emergency response, correct PPE use, and spill/incident procedures.                 | Cl. 7.2   | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>7.3</b>                                                       | Training records are retained; refresher training is scheduled at defined intervals and whenever new chemicals are introduced.          | Cl. 7.2   | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>7.4</b>                                                       | Workers are informed of the specific hazards and health risks associated with chemicals they work with (right-to-know).                 | Cl. 7.3   | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>7.5</b>                                                       | Contractors and visitors who work with or near hazardous chemicals complete a site-specific chemical safety induction.                  | Cl. 8.1.4 | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                      | Requirement / Checklist Item                                                                                               | ISO 45001      | Status                                                                                                                 |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------|
| <b>8. Emergency Preparedness &amp; Response (Cl. 8.2)</b> |                                                                                                                            |                |                                                                                                                        |
| <b>8.1</b>                                                | Emergency response plans include specific written procedures for chemical spills, leaks, fires, and exposure events.       | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>8.2</b>                                                | Spill kits appropriate for the types and volumes of chemicals on site are provided, fully stocked, and clearly identified. | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>8.3</b>                                                | Emergency contact information (Poison Control, Fire, First Aid, Regulator) is posted in all chemical handling areas.       | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>8.4</b>                                                | Emergency drills — including at least one chemical spill scenario — are conducted and documented at least annually.        | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>8.5</b>                                                | First-aid personnel trained in managing chemical exposure are on site and available during all working hours.              | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>8.6</b>                                                | Any antidotes or specific emergency treatments identified in SDS are stocked on site where required.                       | <i>Cl. 8.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                  | Requirement / Checklist Item                                                                                    | ISO 45001        | Status                                                                                                      |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------|
| <b>9. Waste Disposal &amp; Environmental Controls</b> |                                                                                                                 |                  |                                                                                                             |
| <b>9.1</b>                                            | Chemical waste is identified, segregated, labelled, and stored in designated, compliant waste containers.       | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>9.2</b>                                            | All chemical waste is disposed of through licensed contractors in full compliance with applicable legislation.  | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>9.3</b>                                            | Waste disposal records (manifests, certificates of destruction/treatment) are retained for the required period. | <i>Cl. 7.5</i>   | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>9.4</b>                                            | Physical barriers and bunding prevent accidental discharge of chemicals into stormwater or sewer systems.       | <i>Cl. 8.1.2</i> | <div>Yes <input type="checkbox"/> No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                                | Requirement / Checklist Item                                                                                                                      | ISO 45001        | Status                                                                                                                 |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>10. Monitoring, Measurement &amp; Performance Review (Cl. 9)</b> |                                                                                                                                                   |                  |                                                                                                                        |
| <b>10.1</b>                                                         | Health surveillance and/or biological monitoring is conducted for workers exposed to substances requiring medical oversight.                      | <i>Cl. 9.1.2</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>10.2</b>                                                         | Workplace air monitoring is performed regularly; results are compared to occupational exposure limits (OELs) and documented.                      | <i>Cl. 9.1.1</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>10.3</b>                                                         | Chemical safety inspection and audit findings are recorded; corrective actions are tracked to verified closure.                                   | <i>Cl. 9.2</i>   | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>10.4</b>                                                         | Chemical-related incidents, near-misses, and occupational ill-health cases are reported, investigated, and lessons communicated.                  | <i>Cl. 10.2</i>  | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |
| <b>10.5</b>                                                         | Key chemical safety performance indicators (incident rates, audit findings, training completion) are reported to management at defined intervals. | <i>Cl. 9.1.1</i> | <div>Yes <input type="checkbox"/></div> <div>No <input type="checkbox"/></div> <div>N/A <input type="checkbox"/></div> |

| Ref.                                                     | Requirement / Checklist Item                                                                                               | ISO 45001        | Status                                                                                                          |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>11. Legal &amp; Regulatory Compliance (Cl. 6.1.3)</b> |                                                                                                                            |                  |                                                                                                                 |
| <b>11.1</b>                                              | A register of applicable chemical safety legislation, regulations, and standards is maintained and reviewed for currency.  | <i>Cl. 6.1.3</i> | <div> Yes <input type="checkbox"/> No <input type="checkbox"/> </div> <div> N/A <input type="checkbox"/> </div> |
| <b>11.2</b>                                              | All compliance obligations — permits, licenses, substance notifications — have been identified and are actively fulfilled. | <i>Cl. 6.1.3</i> | <div> Yes <input type="checkbox"/> No <input type="checkbox"/> </div> <div> N/A <input type="checkbox"/> </div> |
| <b>11.3</b>                                              | Changes to chemical safety regulations are monitored, assessed for operational impact, and incorporated into procedures.   | <i>Cl. 6.1.3</i> | <div> Yes <input type="checkbox"/> No <input type="checkbox"/> </div> <div> N/A <input type="checkbox"/> </div> |

# Inspection Summary & Sign-Off

|                                |                                                                                                                                                                       |                            |  |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--|
| Total Items Inspected          |                                                                                                                                                                       | Items Compliant (Yes)      |  |
| Items Non-Compliant (No)       |                                                                                                                                                                       | Items Not Applicable (N/A) |  |
| Immediate Actions Required     |                                                                                                                                                                       |                            |  |
| Overall Assessment             | <div><input type="checkbox"/> Satisfactory    <input type="checkbox"/> Action Required</div> <div><input type="checkbox"/> Unsatisfactory — Immediate Stop Work</div> |                            |  |
| Inspector Signature            |                                                                                                                                                                       | Date                       |  |
| Manager / Supervisor Signature |                                                                                                                                                                       | Date                       |  |

## Corrective Action Register

| CA Ref. | Non-Conformance Description | Checklist Ref. | Responsible Person | Target Date | Closed Date |
|---------|-----------------------------|----------------|--------------------|-------------|-------------|
| CA-01   |                             |                |                    |             |             |
| CA-02   |                             |                |                    |             |             |
| CA-03   |                             |                |                    |             |             |
| CA-04   |                             |                |                    |             |             |
| CA-05   |                             |                |                    |             |             |



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