
WHMIS 2015 Chemical Decanting and Secondary Labeling Standard Operating Procedure

1.0 Objective & Intent

The objective of this Standard Operating Procedure (SOP) is to establish mandatory safety protocols for the decanting of hazardous chemicals from bulk containers into secondary containers and the application of compliant WHMIS 2015 labels. This procedure ensures full compliance with WorkSafeBC regulations (OHS Regulation Part 5) and the federal Hazardous Products Act, mitigating the risk of chemical exposure, fire, explosion, and misidentification of hazardous substances on the shop floor.

Improper decanting and labeling of chemicals is a leading cause of workplace incidents, including accidental mixing of incompatible substances, chemical burns, and inhalation of toxic vapours. This SOP is designed to eliminate these risks by enforcing strict engineering controls, administrative procedures, and personal protective equipment requirements.

2.0 Operational Scope

This procedure applies to all maintenance personnel, finishing operators, cabinet assemblers, and any employee who decants or transfers hazardous chemicals from a bulk supplier container (e.g., 20L pail, 205L drum) into a smaller secondary container (e.g., 1L squeeze bottle, 4L jug, spray gun cup) for immediate or short-term use. It covers all chemicals classified under WHMIS 2015, including but not limited to solvents, adhesives, stains, lacquers, thinners, cleaners, and sealants.

This SOP applies to all decanting activities performed in the finishing department, maintenance shop, and any designated chemical storage or mixing area within the facility. It does not apply to the direct use of chemicals from their original supplier container without transfer.

3.0 Hazard Identification & Mandatory PPE

- **Chemical Splash to Eyes and Skin:** Contact with solvents, acids, or caustic cleaners can cause severe burns, dermatitis, or permanent eye damage.
- **Inhalation of Toxic Vapours:** Vapours from decanted chemicals (e.g., acetone, toluene, methylene chloride) can cause dizziness, respiratory irritation, or long-term organ damage.
- **Fire and Explosion:** Many decanted chemicals are flammable. Static discharge or open flames near decanting areas can ignite vapours.
- **Incompatible Chemical Mixing:** Using unlabeled or mislabeled containers can lead to violent reactions (e.g., acid + solvent).
- **Spills and Slips:** Spilled chemicals create slip hazards and environmental contamination.
- **CSA-Approved Safety Glasses with Side Shields** (mandatory at all times in decanting area)
- **Chemical-Resistant Gloves** (nitrile, neoprene, or butyl rated for the specific chemical being decanted)
- **Chemical-Resistant Apron or Coverall** (e.g., Tyvek or PVC apron)
- **CSA-Approved Steel Toed Boots** with chemical-resistant soles
- **Respiratory Protection:** Half-face or full-face respirator with organic vapour cartridges (if local exhaust ventilation is insufficient or if decanting in a non-ventilated area)

4.0 Required Safety Equipment & Tools

- WHMIS 2015 compliant secondary container labels (pre-printed or blank with marker)
- Permanent marker or label printer (for filling in product identifier and hazard statements)
- Chemical-resistant funnel (dedicated per chemical type to avoid cross-contamination)
- Grounding and bonding cables (for flammable liquid decanting, e.g., from drum to container)
- Spill containment pallet or drip tray (to capture drips and small spills)
- Spill kit (absorbent pads, socks, neutralizer, disposal bags) located within 10 metres
- Local exhaust ventilation (LEV) system or portable fume extractor (rated for flammable vapours)
- Fire extinguisher (Class B rated, located within 15 metres of decanting area)
- Eyewash station and safety shower (tested weekly, accessible within 10 seconds)
- Approved secondary container (e.g., HDPE squeeze bottle, metal safety can, or glass bottle with secure cap)

5.0 Step-by-Step Safety Procedure

1. Review the Safety Data Sheet (SDS) for the chemical being decanted. Identify the specific hazards (flammability, toxicity, reactivity) and required PPE. Verify that the SDS is current and accessible in the designated SDS binder or digital system.
2. Inspect the secondary container for cleanliness, cracks, or damage. Ensure the container is made of a material compatible with the chemical (e.g., HDPE for solvents, glass for acids). Confirm the container has a secure, leak-proof cap.
3. Prepare the WHMIS 2015 secondary label. Write or print the following information clearly: product identifier (exact name from SDS), hazard pictograms (e.g., flame, exclamation mark), signal word (Danger or Warning), hazard statements (e.g., 'Highly flammable liquid and vapour'), and precautionary statements (e.g., 'Keep away from heat/sparks/open flames'). Affix the label to the container before decanting begins.
4. Set up the decanting station. Place the bulk container and secondary container on a spill containment pallet. If decanting a flammable liquid, connect a grounding cable from the bulk container to a verified earth ground and a bonding cable between the bulk container and the secondary container. Ensure the local exhaust ventilation is operating and positioned to capture vapours at the source.
5. Don all required PPE as identified in Section 3.0. Perform a final check: safety glasses sealed, gloves intact and rated for the chemical, apron fastened, respirator seal-checked (if required). Verify no ignition sources (e.g., cell phones, unrated tools, open flames) are present within the decanting zone.
6. Slowly pour or pump the chemical from the bulk container into the secondary container using a dedicated funnel. Do not fill the secondary container more than 90% full to allow for thermal expansion and safe handling. Avoid splashing or overfilling. If using a pump, ensure it is rated for the chemical and grounded.
7. Immediately cap the secondary container securely. Wipe down the exterior of the container with a clean, lint-free cloth to remove any residue. Inspect the label to ensure it is legible and firmly attached. If the label becomes damaged or unreadable during the process, apply a new label immediately.
8. Recap the bulk container tightly and return it to the designated storage area (e.g., flammable storage cabinet, acid cabinet). Clean the funnel and any tools used with an appropriate solvent, and dispose of contaminated rags in a designated flammable waste container. Neutralize or absorb any small spills on the containment pallet using the spill kit.
9. Transport the labeled secondary container to the point of use (e.g., finishing booth, assembly station) using a chemical-resistant cart or carrier. Never carry an open container or a container without a secure cap. Ensure the container is stored upright and away from heat sources or incompatible chemicals when not in use.
10. Complete the chemical decanting log (if required by facility policy). Record the chemical name, date, quantity decanted, and your name. Report any spills, equipment malfunctions, or near-miss incidents to your supervisor immediately. Dispose of any waste materials (e.g., used absorbents, contaminated gloves) in accordance with the facility's hazardous waste management plan.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.