WHMIS 2015 RELABELING PROCESS

1.0 INTRODUCTION

This document shows how to update chemical labels so they meet the WHMIS 2015 labeling standards. The most significant change is the implementation of new pictograms and the use of signal words.

2.0 PROCESS

2.1 INVENTORY CHECK

1. Create an updated chemical inventory in eRPortal by going through the lab's physical inventory and checking what is currently stored and used in the lab. If you do not have an eRPortal account, contact Katelyn Versteeg to get one set up.

2. Check the state of each label and identify those that do not meet the WHMIS 2015 standard. New labels are required when:

   a. The state of the supplier label is poor (e.g., no longer legible or securely attached to the container).

   b. The label has out dated pictograms or is missing the following information:

      ▪ Product identifier (Name)

      ▪ Signal word ("Danger" or "Warning")

      ▪ Hazard statements

3. Workplace Labels are used to improve the labels by providing the missing or outdated information. We recommend keeping the old supplier information visible (or writing it on the new label) as it will not be included on the new workplace label.

4. List which chemicals require a new label and begin creating them in Chemwatch. The Safety Office recommends using colour-coded dots to identify bottles of chemicals that require relabeling.

2.2 ACCESS CHEMWATCH

Chemwatch can be accessed through eRPortal or by going to the Safety Office Chemical Inventory Page. Log In using your WatIAM credentials.

Note: Chemwatch works best in Google Chrome

2.3 BUILDING LABELS

Chemwatch contains all the templates required to generate labels. When you add a chemical to a template, the label information populates based on the chemical. Label templates can be accessed using the D-Gen Lab feature built into Chemwatch. D-Gen Lab is where users build labels.

Follow these steps to access the University's label templates:

1. Open D-Gen Lab using the button on the far left of Chemwatch (Figure 1).

Figure 1: D-Gen Lab

2. Search for the chemicals you want to print labels for. **Chemwatch can be slow when searching for labels.** If this occurs, use the advanced search and search by CAS number.

Figure 2: Search bar

3. The search results are displayed in the lower search box (Figure 3).

4. Once they appear in the lower box, the chemicals you wish to create labels for need to be added to the active list (Figure 3). Highlight the chemical in the search results box and click the "Add Selected" button. You should then see the chemical listed in the upper box. The active list can hold up to 35 items.
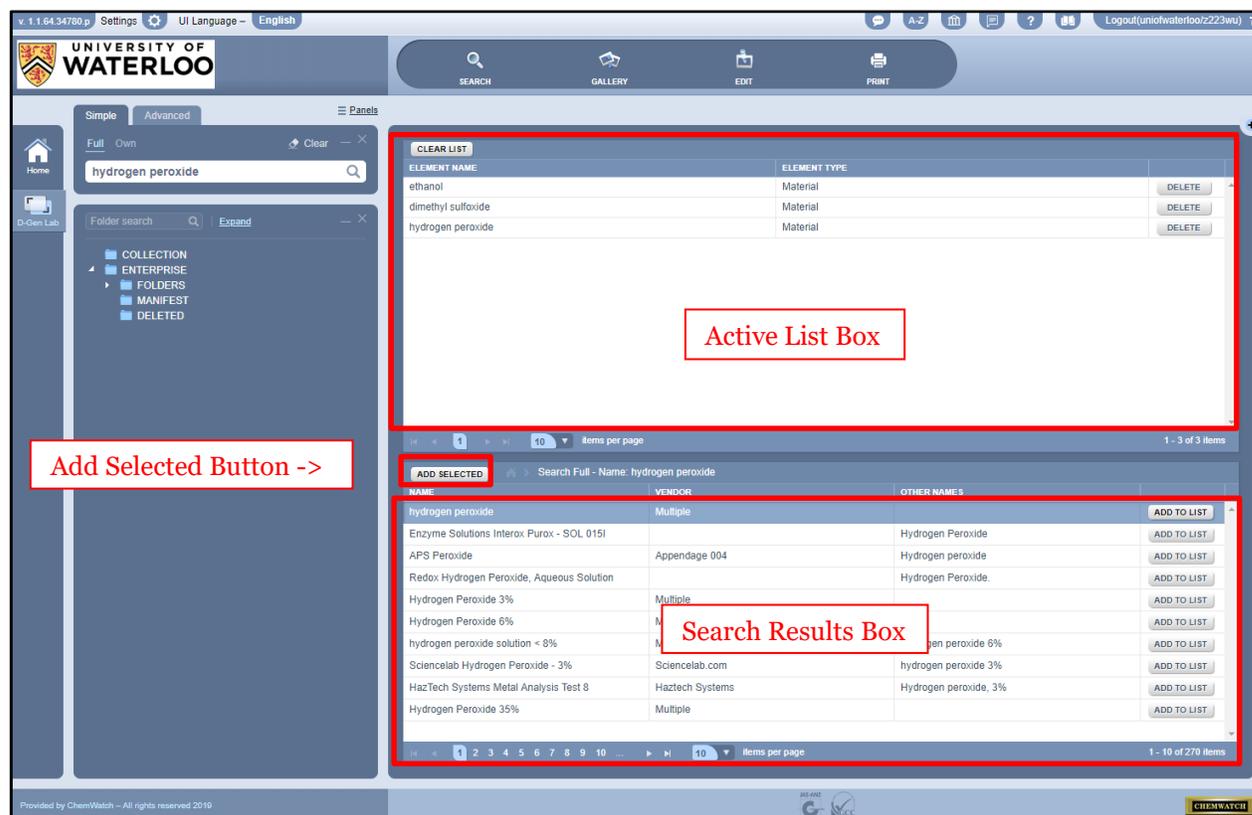

Figure 3: Search results and active list

5. Click the "Gallery" button near the top of the page and then select the "User Defined" tab to access the labels Chemwatch designed for the University.
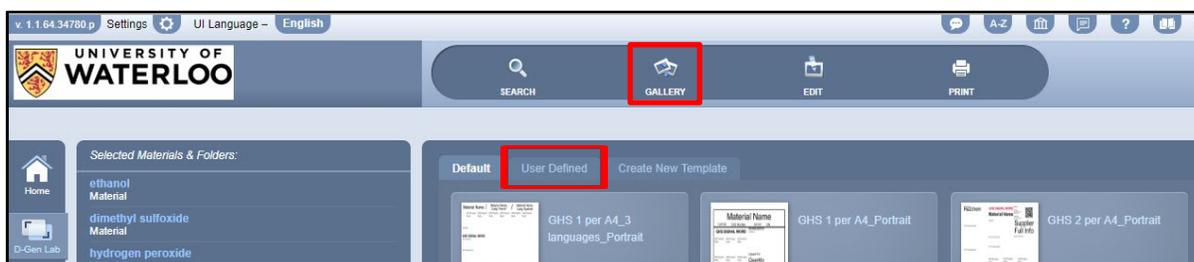
Figure 4: Navigating to the University's pre-designed templates (1 of 2)

6. Along the bottom of the screen, navigate to end of the User Defined templates. The label templates used for the University's chemical inventory relabeling are:

    a. Avery Workplace Small (5160 30/pg) - (1" x 2.625")

    b. Avery Workplace Medium (60505 10/pg) - (2" x 4")

    c. Average Workplace Large (60503 4/pg) - (3.5" x 5")

    d. Avery Workplace Extra Large (60502 2/pg) - (4.75" x 7.75")

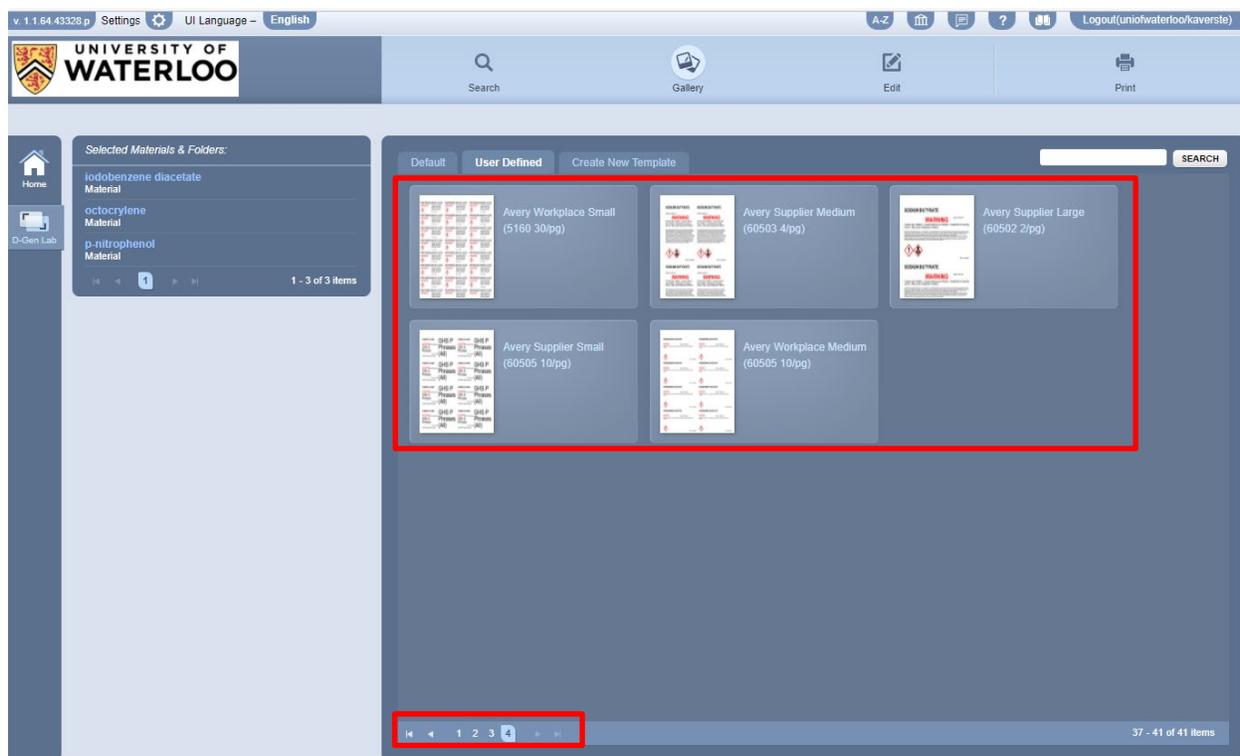**Figure 5: Navigating to the University's pre-designed templates (2 of 2)**

Note: if your lab uses a different label size and requires an additional label template to be made in CHEMWATCH contact Katelyn Versteeg with the details of the required label template.

Label should include at a minimum: chemical name, signal word, hazard statements, pictograms, and a reference to SDS

7. Select a template from the five University options. Once a template is chosen, Chemwatch automatically redirects to the "Edit" screen (Figure 6).
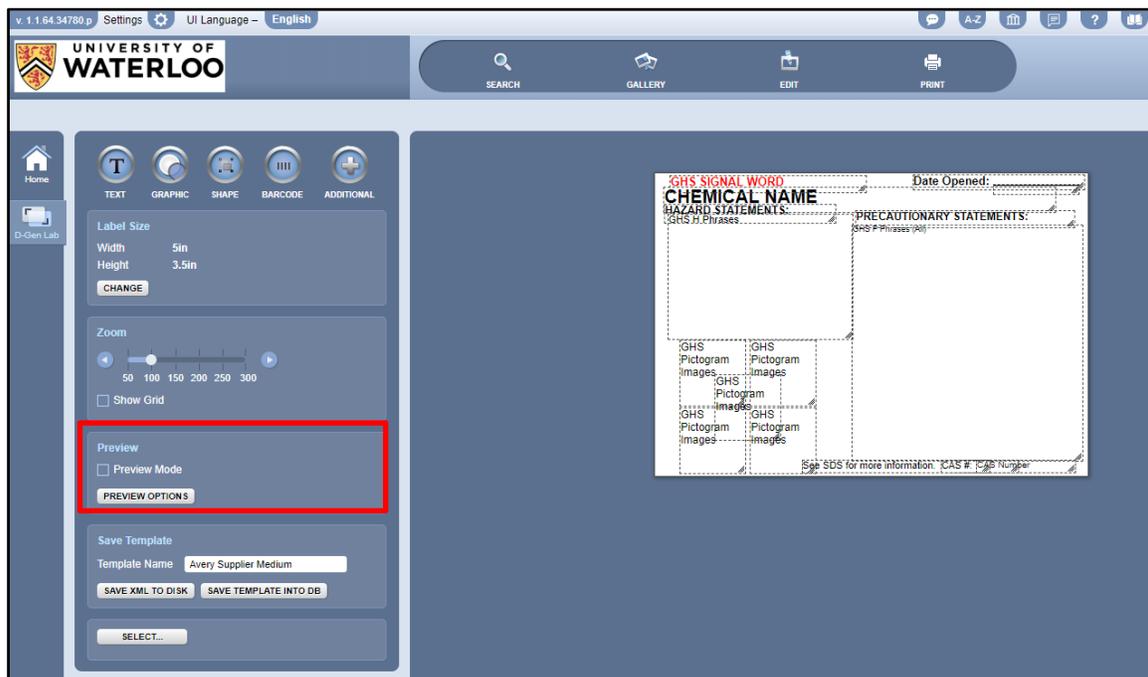
Figure 6: Editing the label

The "Edit" view allows for changes to be made to the template and shows what the label looks like when populated with information. Check the "Preview Mode" box (Figure 6) and Chemwatch will automatically fill in the information of the first item on the active list.

8. Select the "Print" button found near the top of the screen to display the printing options screen.

Figure 7: Printing the label

The "Print Options" section allows for adjustments to the page setup. The margins and spacing should not need to be edited as they are set to match the blank label sheets.

For templates with more than one label on a page, there is the option to select "Multiple Materials Print" where the template will be populated with the materials selected from the active list.

Figure 8: Printing the label

9. Click the "Fill" button (Figure 9).

   The "Fill" button populates the template with the information of the materials selected. If there are more labels on a sheet than materials selected, the labels duplicate beginning at the top of the active list. The "Filled" label template can be saved as a PDF and from there printed.

   It is best to print from a PDF as Chemwatch has limited print options.

10. Click the "Save PDF" button (Figure 9).

Figure 9: Fill and save as PDF

2.4 PRINTING LABELS

1. Open the PDF file.

2. Select the print option and ensure you have the following settings before printing:

    a. Under Page Sizing and Handling, ensure the "Actual Size" check box is selected.

    b. Next, select the "Properties" button and ensure you have the correct tray selected based on where you put the labels in the printer.

    c. Click the "Print" button.
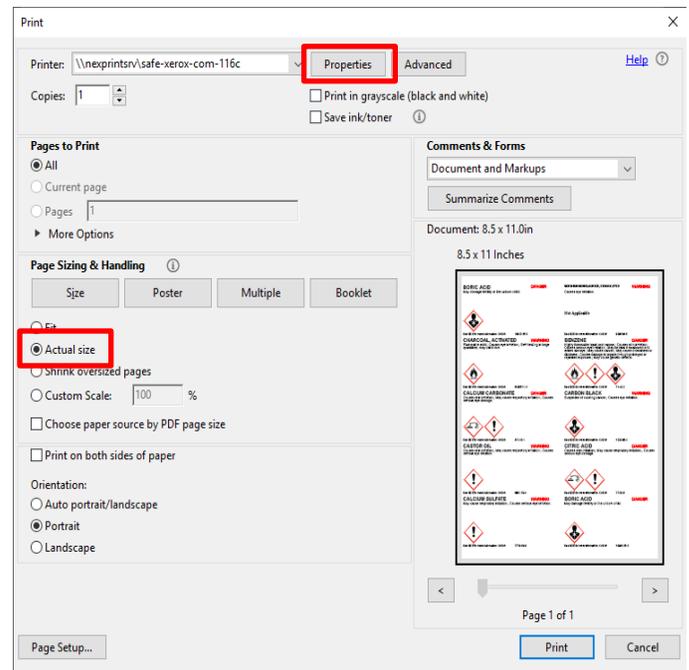
Figure 10: Printer settings

2.5 APPLYING THE LABEL

Printed labels can be passed along to their respective labs to be applied. Once re-labeling is underway, implement a deadline to relabel a week or two following the date when labels were received. A check would then be scheduled to ascertain that the new labels were applied correctly and completely.

3.0 LABELS

3.1 SPECIFICATIONS

Template: Avery Workplace Small	**Template: Avery Workplace Medium**
Labels per Sheet: 30 Label Dimensions (H x W): 1" x 2 5/8" Top Margin: 0.5" Left Margin: 0.163" Horizontal Spacing: 0.13" Vertical Spacing: 0" Avery Prod #: 5160	Labels per Sheet: 10 Label Dimensions (H x W): 2" x 4" Top Margin: 0.5" Left Margin: 0.19" Horizontal Spacing: 0.19" Vertical Spacing: 0" Avery Prod #: 60505
Template: Avery Workplace Large	**Template: Avery Workplace Extra Large**
Labels per Sheet: 4 Label Dimensions (H x W): 5" x 3 ½" Top Margin: 0.5" Left Margin: 0.5" Horizontal Spacing: 0.5" Vertical Spacing: 0 " Avery Prod #: 60503	Labels per Sheet: 2 Label Dimensions (H x W): 4 ¾" x 7 ¾" Top Margin: 0.63" Left Margin: 0.38" Horizontal Spacing: 0" Vertical Spacing: 0.25" Avery Prod #: 60502
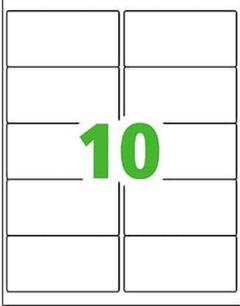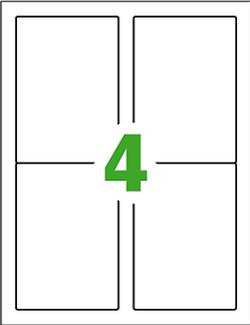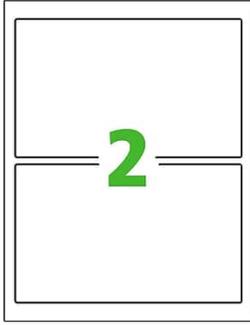
3.2 LABELS USED

Avery Product Number	Dimensions	ChemWatch Template	Sheets/ pack	Labels/ pack	Cost per pack (Staples)	Discounted cost – bulk (20-50 packs)
60502	4 ¾" x 7 ¾"	Avery Workplace Extra Large	50	500	$82.99	$59.99
60503	5" x 3 ½"	Avery Workplace Large	50	200	$82.99	$59.99
60505	2" x 4"	Avery Workplace Medium	50	100	$82.99	$59.99
5160	1" x 2 5/8"	Avery Workplace Small	100	3000	$48.49	$35.96

3.3 SUGGESTIONS FOR ADDITIONAL LABELS

3.3.1 GENERAL USE LABELS

Avery UltraDuty Chemical Resistant Labels, 1" x 2 ½", 600 labels/ pack – Available on Amazon, $58.13

Avery UltraDuty Chemical Resistant Labels, 0.5" x 1 ¾", 1500 labels/ pack – Available on Amazon, $55.25

- Waterproof
- Chemical and UV resistant
- Laser printer compatible
- Can be applied in temperatures as low as -12.2°C and used from -28.9°C to 104.4°C

3.3.2 FREEZER/ CRYO SAFE

Fisherbrand Micryo Labels, 1" x 2.6", 600 labels/ pack – Available at Fishersci, $113.32

- For cryostorage, liquid nitrogen, refrigeration and ultra-low temperature freezers
- Available as label sheets or rolls
- Laser printer compatible
- Adhesive holds in temperatures from -196°C to 121°C

Cole-Parmer Cryogenic Label, 1 11/16" x ¾", 1040 labels/ pack – Available at Cole-Parmer, $99.09

- Suitable for cryogenic storage
- Resistant to detergents, oils, solvents and caustic agents

- Laser printer compatible
- Can be used from -196°C to 150°C

LabTag Cryo Laser Labels, 2.63" x 1", 480 labels/ pack – [Available at International LabTag](#), $64.90

- Available is various colours
- For liquid nitrogen use
- Laser printer compatible
- Can be used from -196°C to 120°C

3.3.3 REMOVABLE LABELS FOR GLASSWARE

Avery Removable ID Labels, 1" x 2 5/8", 300 labels/ pack – [Available at Avery.ca](#) $15.99

- Available as label sheets
- Laser printer compatible

4.0 CHEMICAL LABELLING PROCESS MAP

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┌─────────────────────────────────┐
│ DOES CHEMICAL MATCH DISPOSAL    │
│          CRITERIA?              │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐       ┌──────────┐       ┌────────────────────────────┐
│ 1. Unusable Contents            │──────▶│   YES    │──────▶│    RECOMMEND DISPOSAL      │
│ 2. Compromised Containers       │       └──────────┘       └────────────────────────────┘
│ 3. Unknown Contents             │
│ 4. Unapproved Designated        │
│    Substances                   │
└─────────────────────────────────┘
                │
                ▼
           ┌──────────┐
           │    NO    │
           └──────────┘
                │
                ▼
┌─────────────────────────────────┐       ┌──────────┐       ┌────────────────────────────┐
│ IS BOTTLE COMPLIANT WITH        │──────▶│   YES    │──────▶│ ENSURE BOTTLE AND CONTENTS │
│ WHMIS 2015?                     │       └──────────┘       │ IS IN CHEMICAL INVENTORY.  │
│ Information Elements Required    │                          │ PROCESS DONE.              │
│ on a WHMIS 2015 Label - Canada.ca│                         └────────────────────────────┘
└─────────────────────────────────┘
                │
                ▼
           ┌──────────┐
           │    NO    │
           └──────────┘
                │
                ▼
┌─────────────────────────────────┐
│        REPLACE LABEL            │
│ Choose Label Size               │
│ (Small, Medium, Large, X-Large) │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│      ACCESS CHEMWATCH           │
│ Chemical inventory system       │
│ (erPortal) and labelling |      │
│ Safety Office | University of   │
│ Waterloo (uwaterloo.ca)         │
│ Log in to Chemwatch with        │
│ WATIAM Account.                 │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│ CLEAN SURFACE OF BOTTLES /      │
│ CONTAINERS                      │──────────▶
│ Glass cleaners, Windex, goo     │
│ gone, adhesive remover works    │
│ well on adhesive residue.       │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│        PASTE NEW LABEL          │
└─────────────────────────────────┘
                │
                ▼
┌─────────────────────────────────┐
│ ENSURE BOTTLE AND CONTENTS IS   │
│ IN CHEMICAL INVENTORY.          │
│ PROCESS DONE.                   │
└─────────────────────────────────┘
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To Print One of Each Label
1. Go to the D-Gen Lab on the Side Bar
2. Create a list of chemicals you'll be printing out. For faster searching, search in the advanced tab by CAS #.
3. Cannot exceed 36 chemicals.
4. Click Gallery, on the last page of the USER DEFINED tab, select the label template based on size
5. Select the Print tab. Click "Multiple Materials Print" and select the chemicals you want to fill the label with. If you select fewer chemicals than number of labels on the page, the chemicals will repeat themselves.
6. Click Fill Button to add Chemical Information
7. Do Not Print Directly from CHEMWATCH, click SAVE PDF, download the PDF and print the label from adobe (ensure fit to page is not selected)

To Print a Full Page of the Same Label
1. GO to the home tab
2. Search by material name or CAS #
3. Right click the chemical of choice. Click Report Type, then Label.
4. Select the appropriately sized User Defined label on the final page
5. Click the Download button on the top right of the page to download pdf to print

If label does not appear correctly on CHEMWATCH or SDS is not available, MS Word templates are available for download on our chemical inventory website to make custom labels.