

DAVID DOUGLAS SCHOOL DISTRICT HAZARD COMMUNICATION PLAN



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Updated 7/8/2022

David Douglas School District is committed to ensuring the safety and health of our employees and students. The purpose of this Hazard Communication Plan is to ensure that employees with a potential exposure to a hazardous chemical know and understand how to avoid potential harmful effects.

The Hazard Communication Plan is prepared and updated by the District's Risk Manager.

This plan reviews:

- General chemical safety rules
- Identifying hazardous chemicals
- Safety data sheets (SDS-formerly MSDS)
- Online SDS library
- Purchasing of chemicals
- Storage of chemicals and labeling of hazardous chemical containers
- Training employees about chemical hazards
- Informing contractors and other employers about our hazardous chemicals

Contacts:

Risk Management – 8212
Chemical Hygiene Officer – 8052
Operations Assistant – 8299

GENERAL CHEMICAL SAFETY RULES

Employees should assume all chemicals are hazardous. Chemicals should be used in as small of quantities as possible so that exposure is minimized and possible harmful effects are reduced. Employees required to use or handle hazardous chemicals will be trained in how to safely use those specific chemicals and should consult their supervisor prior to handling any unfamiliar chemicals that they have not been trained to use.

Employees shall follow the general safety rules below when working with chemicals:

- Ensure they understand how to access Safety Data Sheets (SDS) [formerly MSDS or Material Safety Data Sheets] through the MSDSOnline system.
- Ensure they have read and understood the SDS prior to using any chemical. If the SDS is not available, the chemical may not be used.
- Keep work areas/lab stations clean and orderly.
- Review the SDS for the appropriate personal protective equipment (PPE) and ensure that the PPE is available and used when the chemical is used.
- Ensure every container is labeled with the identity of its contents and appropriate hazard warnings.
- Ensure that incompatible chemicals are stored in separate areas.
- Ensure that less toxic materials are substituted whenever possible.
- Limit the volume of chemicals to the minimum amount needed.
- Chemical inventories should be reviewed at least yearly to evaluate that the chemical is still safe to use.
- Ensure that all chemicals are properly disposed of and District disposal processes are followed.
- Ensure that materials necessary for containing the chemical if equipment or containers should break or spill their contents are available and accessible.
- Rinse emptied bottles that contain acids or inflammable solvents before disposal.
- Follow District disposal processes when recycling unused laboratory chemicals wherever possible. (See the chemical hygiene plan)
- *DO NOT* Place hazardous chemicals in salvage or garbage receptacles.
- *DO NOT* Pour chemicals onto the ground.
- *DO NOT* Dispose of chemicals through the storm drain system.

IDENTIFYING HAZARDOUS CHEMICALS

Prior to working with chemicals, employees must review the information contained in the safety data sheets to ensure they understand the chemical and its potential hazards. Employees must read the SDS to ensure they understand how to resolve any issues resulting from a chemical reaction and understand what materials are required in case of a spill as well as understand any PPE required while using the chemical(s).

Employees can find SDS in the online system located on every employee's dashboard - <https://dashboard.ddouglas.k12.or.us/app/applications>. This online system is called MSDSOnline found on the dashboard at <https://chemmanagement.ehs.com/9/ac1eadf2-50b8-46f2-873b-5d152094d445/ebinder>.

Employees may **NOT** keep a separate system for SDS.

SAFETY DATA SHEETS - SDS

(PREVIOUSLY KNOWN AS MATERIAL SAFETY DATA SHEETS – MSDS)

The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)) requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDS) for each hazardous chemical to users to communicate information on the hazards relating to the respective chemical. SDS are required to be presented in a consistent user-friendly, 16-section format. The guidance below is to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDS.

Below are the 16 sections of the SDS, along with a brief description their contents:

Section 1: Identification – Product Name, Manufacturer/Responsible Party contact, Recommended Product Use and Restrictions On Use

Section 2: Hazard(s) Identification – Hazard Classification, Signal Word, Hazard Statement(s), Pictograms – as described under chemical labeling, Precautionary Statements, Unclassified Hazards, Mixtures with Unknown Acute Toxicity Percentages

Section 3: Composition/Information on Ingredients

Section 4: First-Aid Measures – describes initial care due to an exposure

Section 5: Fire-Fighting Measures – describes the equipment necessary to extinguish a fire caused by a chemical

Section 6: Accidental Release Measures – describes appropriate spill response and exposure prevention/minimization

Section 7: Handling and Storage – describes what is necessary for safe handling and storage of the chemical

Section 8: Exposure Controls/Personal Protection – describes the exposure limits, controls, and ppe needed to limit chemical exposure

Section 9: Physical and Chemical Properties – describes properties of the chemical such as appearance, flammability or explosive limits, pH, melting or freezing point as examples.

Section 10: Stability and Reactivity – describes the ~~reactivity~~reactivity hazards and information on the stability of the chemical

Section 11: Toxicological Information – describes the health effects

Section 12: Ecological Information (non-mandatory) – provides information to be able to evaluate the environmental impact if the chemical were released

Section 13: Disposal Considerations (non-mandatory) – provides for proper disposal of the chemical and safe handling practices for disposal.

Section 14: Transport Information (non-mandatory) – provides guidance on shipping and transporting of hazardous chemicals

Section 15: Regulatory Information (non-mandatory) – includes the safety, health and environmental regulations specific for the chemical

Section 16: Other Information – describes when the SDS was prepared or last revision made

ONLINE SDS LIBRARY

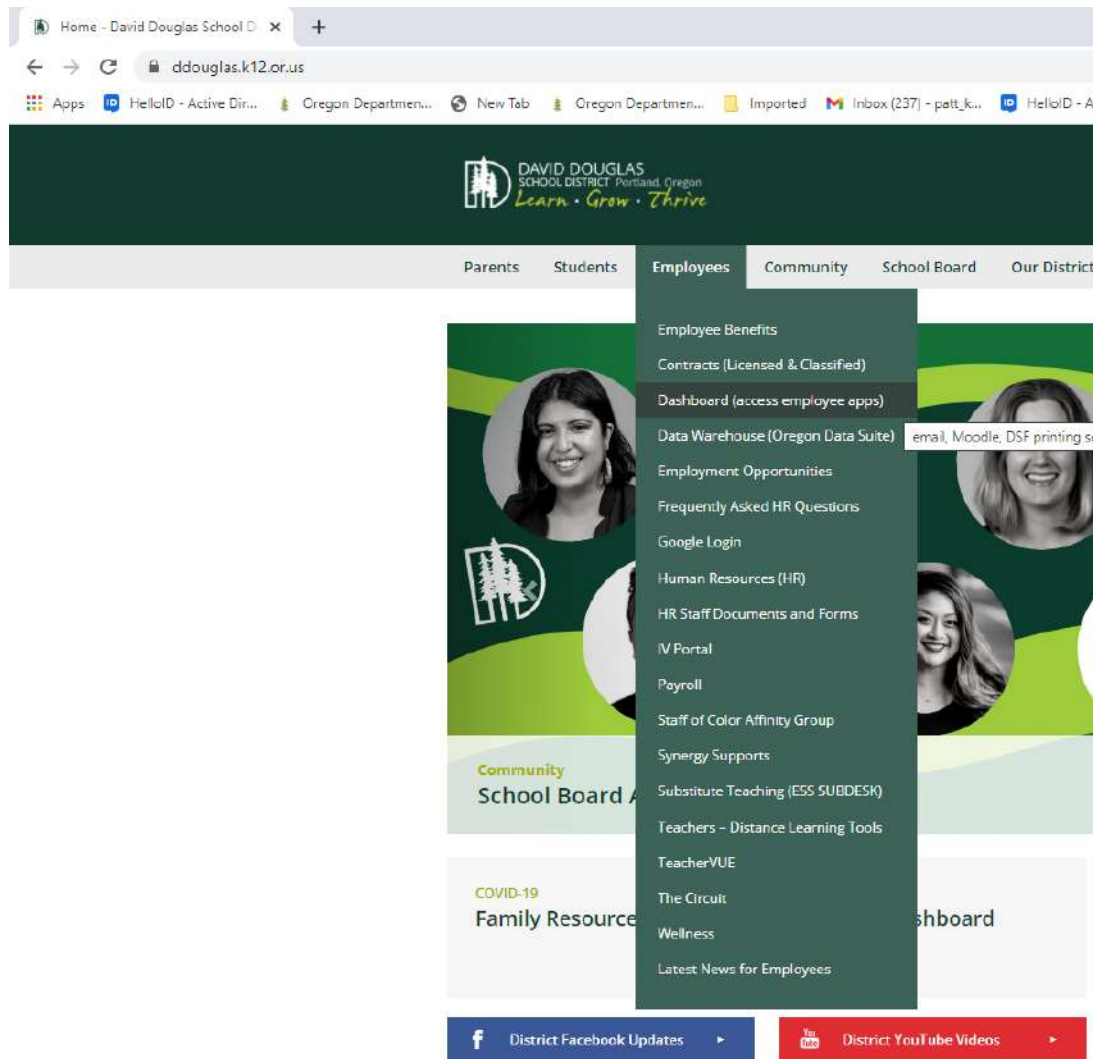
The District uses MSDSOnline to retain all SDS sheets for chemicals for the District. All SDS sheets must be listed in the system, and employees should review the SDS in the MSDSOnline system prior to utilizing a chemical. If the SDS is not in the system, an employee may not use the chemical until the SDS is included in the MSDSOnline System.

As a reminder, generally available household chemicals being used for their household purpose and being used in the same frequency are not covered under the hazard communication standard. Food grade substances are not covered by this OSHA laboratory standard, but are covered under FDA and EPA standards. Utilizing a household chemical, such as ammonia or bleach, for a laboratory experiment disqualifies it from this exemption and REQUIRES that an SDS be maintained as per the hazard communication standard.

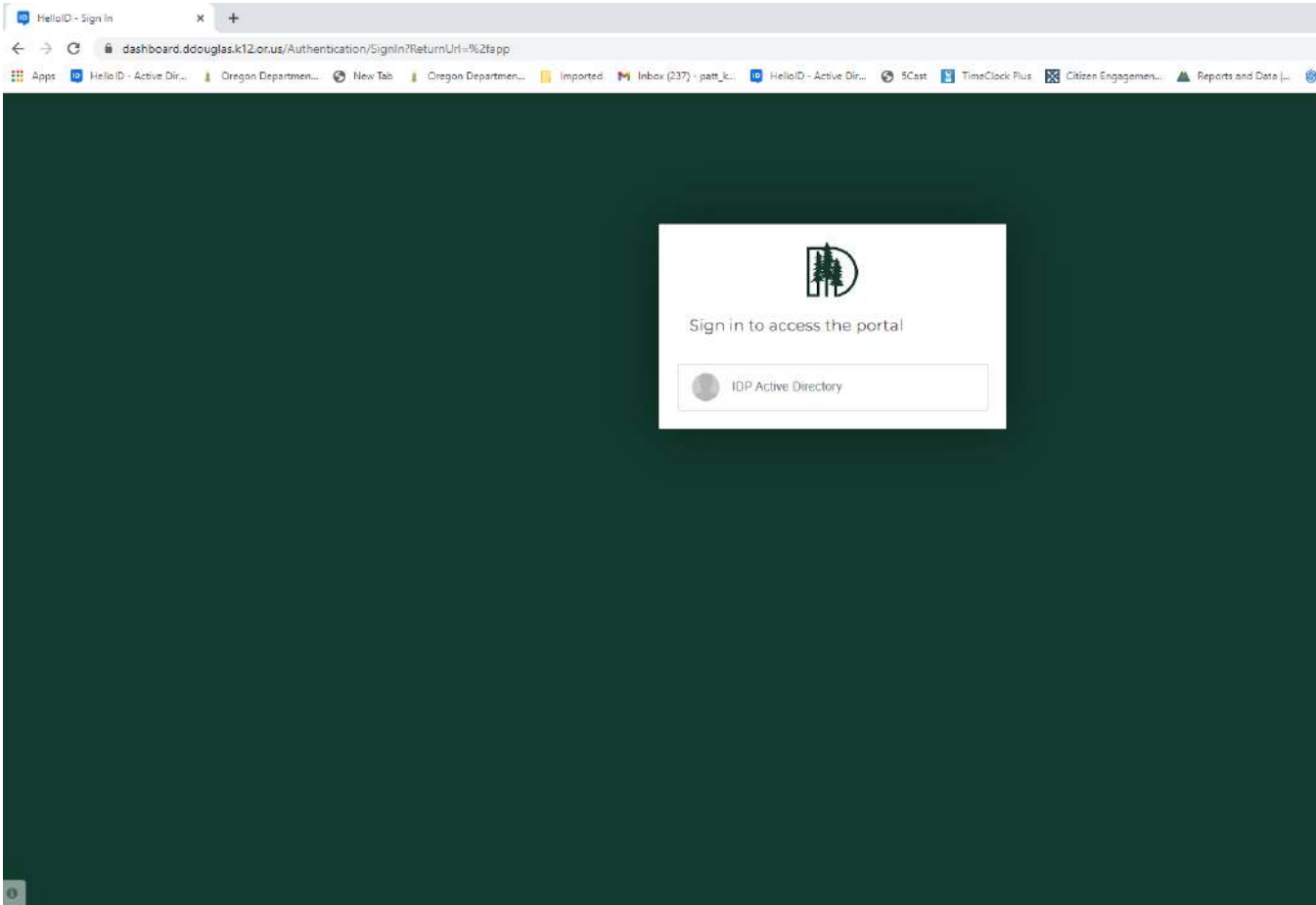
The Operations Assistant in the facilities department updates the SDS system as new SDS sheets are received.

Accessing MSDSOnline:

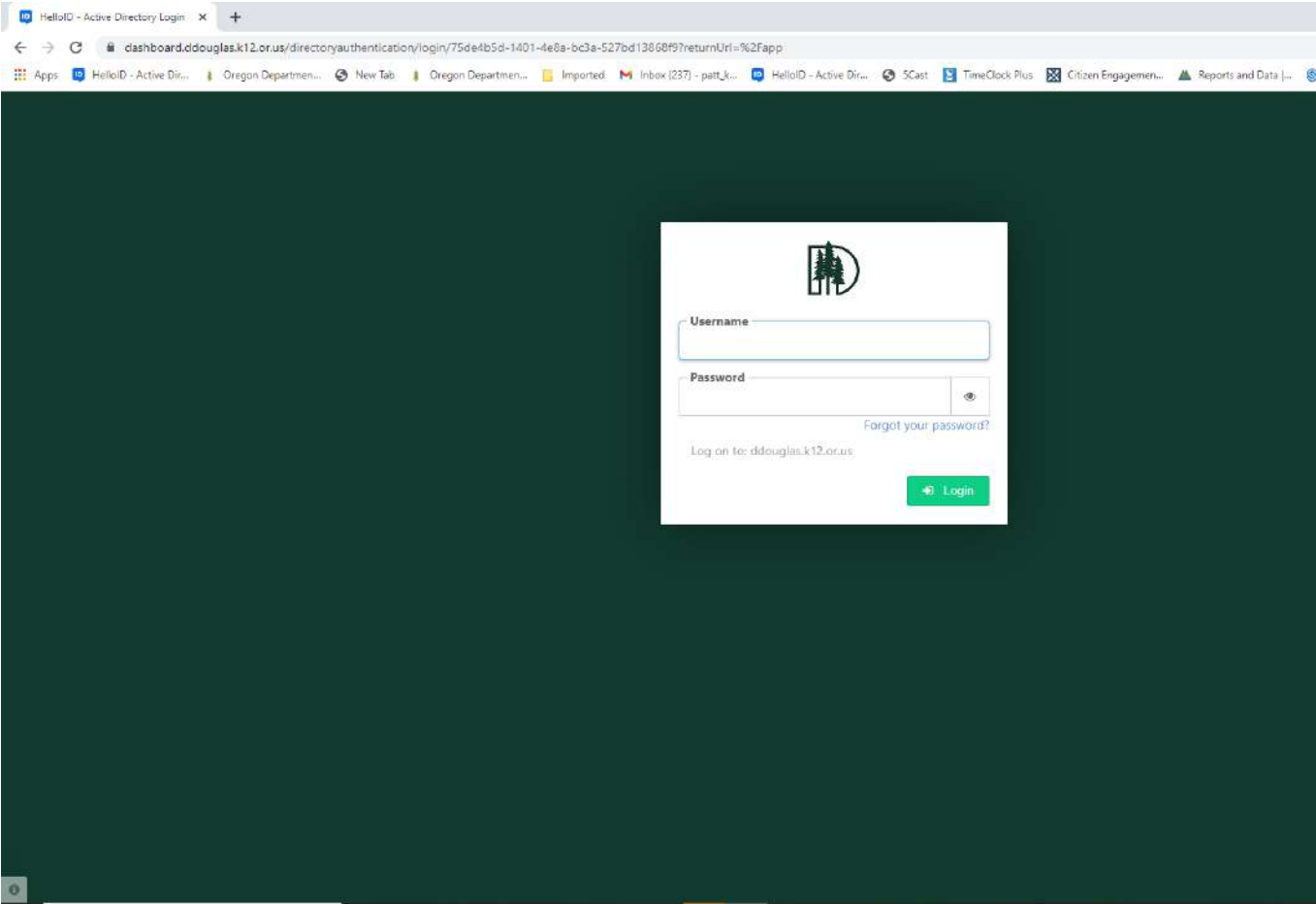
Employees may access MSDSOnline through their dashboard. If the computer does not load a dashboard directly, employees may access it from the employees drop down menu on the District home page. Select employees and dashboard.



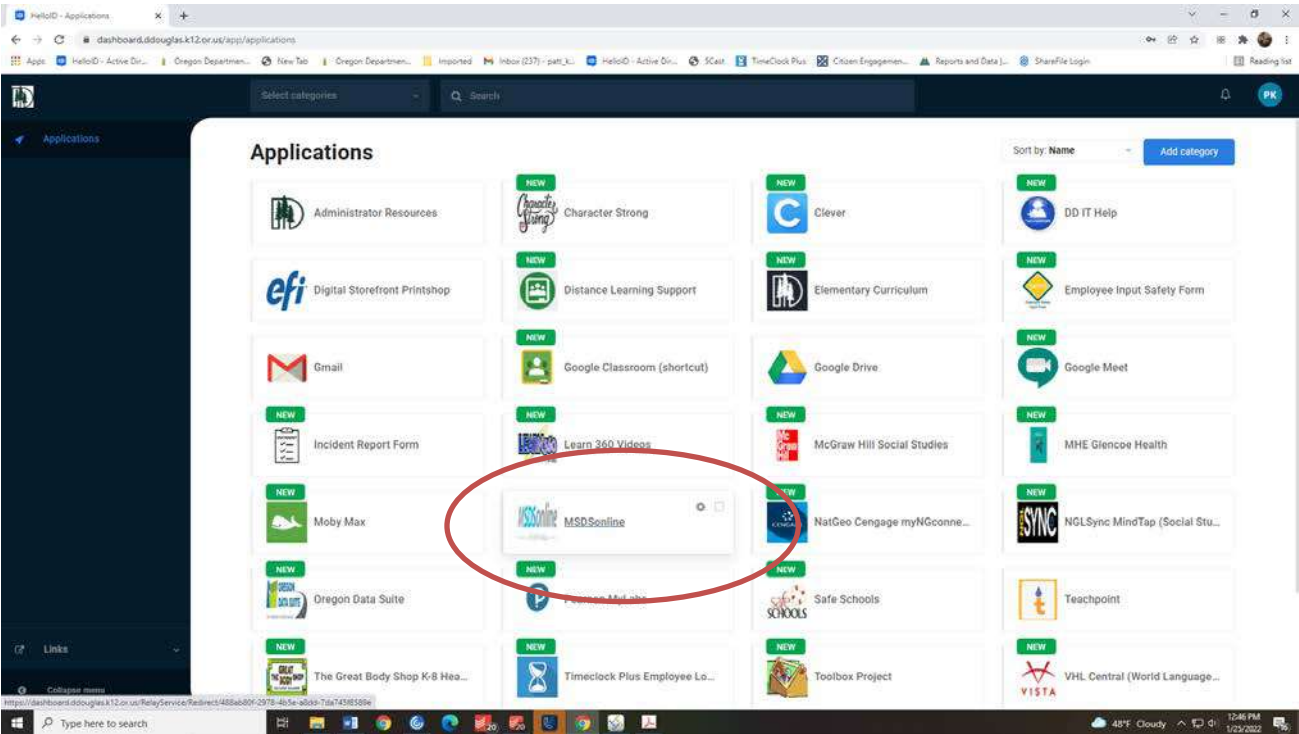
This will go to the portal sign in. Select IDP Active Directory.



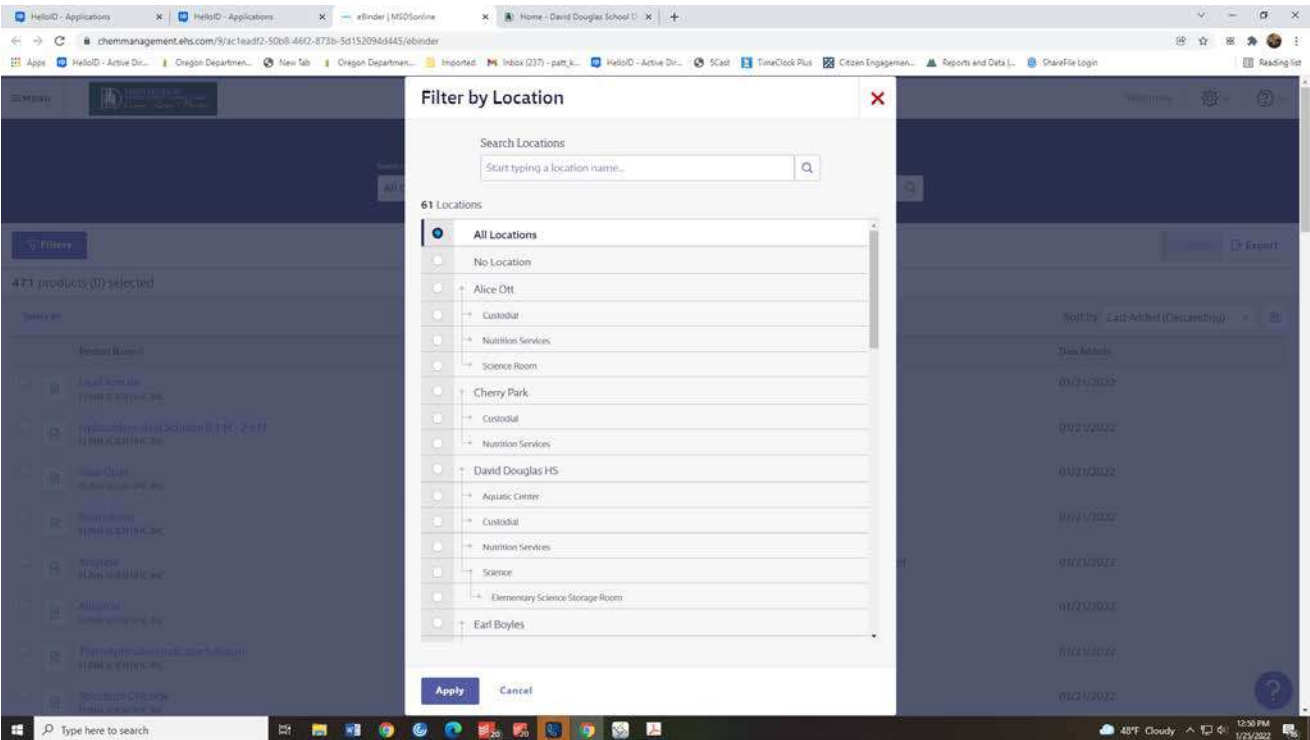
Employees should be at the page to enter their username and password. Enter those.



Employees can then enter the MSDSonline application by selecting it.



Once selected employees can research the SDS system by filtering by location.



Employees may also search the database by the categories in the drop down box.

The screenshot shows a web browser window with multiple tabs. The active tab is 'eBinder | MSDOnline'. The address bar shows the URL 'chemmanagement.ehs.com/9/ac1eadf2-50b8-46f2-873b-5d152094d445/eBinder'. The browser's address bar and tabs show various open pages including 'HelloID - Applications', 'eBinder | MSDOnline', and 'Home - David Douglas School'. The main content area is the 'eBinder' interface. At the top right, it says 'eBinder for All Locations'. Below this is a search bar with a dropdown menu labeled 'Search eBinder by'. The dropdown menu is open, showing options: 'All Categories', 'Product Name', 'Product Code', 'Manufacturer', 'Product CAS #', 'Document ID', 'Ingredient', 'Ingredient CAS #', 'Custom 1', and 'Custom 2'. The 'All Categories' option is currently selected. Below the search bar, there is a 'Filters' button and a status bar indicating '471 products (0) selected'. The main table displays a list of products with columns for 'Product Name' and 'Revision Date'. The products listed are: Lead Acetate, Hydrochloric Acid Solution 0.1 M - 2.4 M, Guar Gum, Bromoform, Amylase, Albumin, Thymolphthalein Indicator Solution, and Strontium Chloride. All products are from 'FLINN SCIENTIFIC INC'.

Product Name	Revision Date
Lead Acetate FLINN SCIENTIFIC INC	03/24/2014
Hydrochloric Acid Solution 0.1 M - 2.4 M FLINN SCIENTIFIC INC	12/02/2018
Guar Gum FLINN SCIENTIFIC INC	02/05/2014
Bromoform FLINN SCIENTIFIC INC	09/21/2014
Amylase FLINN SCIENTIFIC INC	02/05/2014
Albumin FLINN SCIENTIFIC INC	02/05/2014
Thymolphthalein Indicator Solution FLINN SCIENTIFIC INC	03/20/2014
Strontium Chloride FLINN SCIENTIFIC INC	10/18/2015

Employees should thoroughly read the SDS to understand the chemical usage, the PPE required when using the chemical, and what is required for a spill cleanup prior to using the chemical. Employees shall evaluate each task that requires the use of chemicals to determine the potential hazards associated with their work. This hazard evaluation must include review of the chemical or combination of chemicals that will be used and any other materials that will be used.

Should a reaction occur that may have the potential to cause serious injury or property damage, a Safe Operational Procedure (SOP) must be prepared and followed. Employees should plan to minimize the generation of hazardous wastes. Prior to mixing any chemicals a SOP must be prepared and followed. Consult with your supervisor or the Chemical Hygiene Officer for an SOP if you do not have one.

PURCHASING CHEMICALS

All staff must observe the appropriate purchasing processes as outlined by Board policy. All purchases require preapproval per Board policy.

Food grade substances are not covered by this OSHA laboratory standard, but are covered under FDA and EPA standards. Seek advice about how to document a Safety Data Sheet for these substances if they are used frequently. Household chemicals are covered by the OSHA laboratory standard, and require an SDS just the same as laboratory grade chemicals.

Requests for chemical purchases should be made through the requisition process and will be approved by the appropriate supervisor or designee as noted in the chart below:

- Chemical requests from custodial or maintenance staff must be approved by the facilities manager, custodial supervisor, or maintenance supervisor.
- Chemical requests from transportation staff must be approved by the transportation manager, transportation supervisor or transportation shop supervisor.
- All other chemical purchase requests must be approved by the chemical hygiene officer.

As a reminder, when purchasing household chemicals for laboratory use, the GHS standards apply and purchasing process must be followed as if for any other laboratory chemical.

Chemicals purchased for laboratories at schools must follow the requisition process and be purchased by the purchasing department at District office. School purchasing cards may not be used to purchase chemicals. Laboratory staff should purchase the smallest amount/quantity of a chemical needed. Schools will route requests approved by their principals to purchasing. The request needs to clearly identify the chemical as well as a link to the SDS. Purchasing staff will route laboratory purchases to the chemical hygiene officer for review and approval prior to ordering.

Staff are reminded that when requesting chemicals they must submit detailed information (manufacturer and name of product) for the item requested with their requisition. Once a chemical is approved the approver will ensure that the SDS is routed to the operations assistant to be added to the MSDSOnline system.

CHEMICAL STORAGE, LABELING AND DISPOSAL

STORAGE

Solid and liquid chemicals must be separated during storage to reduce the possibility of unwanted chemical reactions caused by any potential accidental mixing. Explosives should be stored separately outdoors. Refer to the SDS for proper storage. Consult with the Chemical Hygiene Officer if you have questions.

Utilize either distance or barriers such as lips, strips, or bars installed across the width of storage shelves to isolate chemicals into the following groups and to provide restraint in case of earthquake. Employees should observe the following when storing chemicals:

- Flammable Liquids: these must be stored in approved flammable storage lockers.
- Acids: treat acids as flammable liquids and store in approved flammable storage lockers.
- Bases: do not store bases with acids or any other material.
- Other liquids: ensure other liquids are not incompatible with any other chemical in the same storage location.

Employees must not store chemicals in the same refrigerator used for food storage. Refrigerators used for storing any chemicals must be appropriately identified by a label on the door noting that no food may be present in the refrigerator and employees must follow this practice. Refrigerators located in areas where chemicals are stored may **NOT** be used to store food.

CHEMICAL CONTAINER LABELING

Employees must ensure that all containers of chemicals are properly labeled as per GHS labeling requirements. Every type of container from storage tanks to spray bottles of cleaners must have clear labels identifying contents. The following requirements apply:

- All containers must have the appropriate label, tag or marking that is clearly visible.

TAGS/MARKINGS

A tag or marking is put on a chemical container when the entire amount of the chemical will be used in the same day with no remaining chemical.

- The tag or marking must indicate these:
 - The identity of the contents of the container including concentration,
 - Safety information regarding the contents of the container, and
 - Any health hazards relating to the contents of the container.

LABELS

A label with all the requirements listed below is utilized when chemical amounts exceed the daily use requirement or are being stored.

OSHA has updated the requirements for labeling of hazardous chemicals under its Hazard Communication Standard (HCS). All labels are required to have the following:

- Pictograms,
 - A signal word,
 - Hazard and precautionary statements,
 - The product identifier, and
 - Supplier identification.
- Original labels, tags and markings must be maintained in a legible condition and not be defaced.
 - Incoming chemicals are to be checked for proper labeling.
 - Any chemical that is transferred from labeled containers must be labeled according to GHS requirements. All portable containers are to be labeled in compliance with GHS regulations.

A sample HCS label, identifying the required label elements, is shown below as well as a sample label identifying each label component:

SAMPLE LABEL

PRODUCT IDENTIFIER

CODE _____
Product Name _____

SUPPLIER IDENTIFICATION

Company Name _____
Street Address _____
City _____ State _____
Postal Code _____ Country _____
Emergency Phone Number _____

PRECAUTIONARY STATEMENTS

Keep container tightly closed. Store in cool, well ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measure against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear Protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon dioxide (CO₂) fire extinguisher to extinguish.

First Aid

If exposed call Poison Center.
If on skin (on hair): Take off immediately any contaminated clothing. Rinse skin with water.

HAZARD PICTOGRAMS



SIGNAL WORD
Danger

HAZARD STATEMENT

Highly flammable liquid and vapor.
May cause liver and kidney damage.

SUPPLEMENTAL INFORMATION

Directions for use

Fill weight: _____ Lot Number _____

Gross weight: _____ Fill Date: _____

Expiration Date: _____

The example below shows a sample product label with the six required elements for an HCS label.

PRODUCT NAME or IDENTIFIER	SUPPLIER IDENTIFICATION	PRECAUTIONARY STATEMENTS
Should match the product identifier on SDS	Name, address, telephone number of supplier	Measures to minimize/prevent effects of hazard (includes first aid)



1 Heptane

2 DANGER

3 Highly flammable liquid and vapor. May be fatal if enters airways. May cause dizziness. Causes skin irritation. Toxic to aquatic life with long lasting effects.





Heptane UN 1206/ CAS# 142-82-5

5

Hark Industries
1919 Empire Ave.
Anaheim, CA 92806
(123) 456-7890

4

6

PRECAUTIONARY STATEMENTS
Keep away from heat, flames, sparks. Wear protective gloves and face/eye protection. Avoid breathing fumes, gas or mist. Wash hands after handling. Use non-sparking tools. Use outdoors or in a well ventilated area. Ground container and receiving equipment. Use explosion-proof electrical, lighting, equipment. Prevent static discharge. Keep container tightly closed.

RESPONSE
If swallowed: Immediately call a poison center/doctor. Do not induce vomiting.
If on skin: Remove contaminated clothing. Rinse skin with water. If irritation occurs, seek medical advice.
If inhaled: Remove victim to fresh air. If feeling unwell, get medical attention.
If in eyes: Rinse with water for several minutes. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical attention.
In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction.

STORAGE: Store locked up, in a cool, well-ventilated place. Keep container tightly closed.

Dispose of contents to comply with local, state and federal regulations.

SIGNAL WORD

Indicates the relative severity of hazard

HAZARD STATEMENTS










Describes the nature of hazard

PICTOGRAMS

Symbols that convey health, physical and environmental information

Hazard Communication Standard (HCS) Pictogram

As of June 1, 2015, the Hazard Communication Standard required pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification. HCS pictograms are found below:

<p>Health Hazard</p>  <ul style="list-style-type: none"> • Carcinogen • Mutagenicity • Reproductive toxicity • Respiratory sensitizer • Target organ toxicity • Aspiration toxicity 	<p>Flame</p>  <ul style="list-style-type: none"> • Flammables • Pyrophorics • Self-heating • Emits flammable gas • Self-reactives • Organic peroxides 	<p>Exclamation Mark</p>  <ul style="list-style-type: none"> • Irritant (skin and eye) <ul style="list-style-type: none"> • Skin sensitizer • Acute toxicity (harmful) <ul style="list-style-type: none"> • Narcotic effects • Respiratory tract irritant • Hazardous to ozone layer
<p>Gas Cylinder</p>  <ul style="list-style-type: none"> • Gases under pressure 	<p>Corrosion</p>  <ul style="list-style-type: none"> • Skin corrosion/burns <ul style="list-style-type: none"> • Eye damage • Corrosive to metals 	<p>Exploding Bomb</p>  <ul style="list-style-type: none"> • Explosives • Self-reactives • Organic peroxides
<p>Flame Over Circle</p>  <ul style="list-style-type: none"> • Oxidizers 	<p>Environment*</p>  <ul style="list-style-type: none"> • Aquatic toxicity <p><i>*under EPA jurisdiction</i></p>	<p>Skull & Crossbones</p>  <ul style="list-style-type: none"> • Acute toxicity (fatal or toxic)

CHEMICAL DISPOSAL

Employees must read the SDS prior to using a chemical and understand how to clean up and dispose of the chemical when completed with use. Employees should consult with their supervisor or the chemical hygiene officer regarding disposal of chemicals.

TRAINING

Before employees start their jobs or are exposed to new hazardous chemicals, employees must complete a hazard communication training that covers the following topics:

- An overview of the requirements in Oregon OSHA's hazards communications rules.
- The location of the Hazards Communication Plan and where it may be reviewed.
- Any operations in their work area where hazardous chemicals are used.
- Physical and health hazards of the chemicals in their work areas.
- Steps taken to prevent or reduce exposure to these chemicals.
- How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
- An explanation of the labels required on all containers.
- The information on SDS and how to obtain and use an SDS.
- Emergency procedures to follow if an employee is exposed to these chemicals.

The hazards communication awareness training is part of the mandatory training all employees receive upon hire and is reviewed yearly in the mandatory trainings.

EMERGENCIES AND SPILLS

Employees must review SDS prior to using a chemical. Employees should review the PPE needed and ensure they have the PPE prior to using the chemical. As part of preparation, employees should understand and be prepared for potential spill situations and have the necessary materials nearby in case of an accidental spill. Not all spills require an emergency response; be sure you understand the chemical properties and spill response prior to utilizing any chemical to ensure you understand what to do in case of a spill.

In case of an emergency, implement the proper Emergency Action Plan.

- Notify personnel in the room/area of the spill to evacuate immediately.
- Notify your supervisor of the situation.
- Close windows and doors to the room/area of the spill and evacuate.
- Review the SDS for proper cleanup of the chemical.
- Call 911 to report the emergency.
- Remove clothing and wash all parts of the body, which may have come in contact with the chemical using copious amounts of water.
- All personnel who may have been contaminated by the chemical should report to and remain in one safe location until the arrival of the Fire Department. This will decrease the chance of contaminating other personnel and other areas.
- Do not re-enter the room/area until the appropriate safety officials have determined that the area is safe to re-enter.

CONTRACTOR INFORMATION

All outside contractors working on the jobsite or inside District Facilities are required to follow the requirements of this program. The District will provide Contractors information concerning:

- Precautions to be taken to protect contractor employees
- Potential exposure to hazardous substances
- Chemicals used in or stored in areas where they will be working
- Location and availability of Safety Data Sheets
- Recommended Personal Protective Equipment as per the SDS
- Labeling system for chemicals