

Script for Module Three

Georgia Tech Susan Harwood Grant

Slide 1

Welcome to Module 3 of our hazard communication training sessions. This training will cover, “OSHA’s Hazard Communication Standard.”

This next section will talk about the law requiring workplaces to provide information to employees about the chemicals they use to perform their jobs. We will look at common labels you might see on chemical containers and explain how to use them.

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Slide 2

Employers at a facility must manage the chemicals that are used in the workplace and during this module we will discuss the ways this is accomplished. Employers must also provide information to employees about the chemicals they use and their hazards. Hazards are things that could cause the employee injury, illness, or harm. Information about how to use chemicals properly and safely must be provided to the employees.

These objectives are achieved by following the requirements of OSHA’s rule called the Hazard Communication Standard (HCS).

By performing these actions, employers help prevent exposure or contact with the chemicals employees must use to keep the food production area and equipment safe.

Slide 3

OSHA requires the following elements be necessary for the hazard communication standard. The facility must have a written hazard communication program that includes a list of all hazardous chemicals in the facility, and provides information on chemical labels in the facility, safety data sheets, employee information and training. The program must also have instructions on how infrequent tasks involving hazardous chemicals will be managed, as well as chemicals in pipes systems in a facility. Employees and their representatives can have access to the written hazard communication program at their request.

We will talk more in detail about labels and safety data sheets in the next few minutes.

Slide 4

OSHA’s law requires that all containers of hazardous chemicals in the workplace have proper labels. The information can contain either the label information on the shipped container or a combination of a product identifier and words, pictures, symbols, that provide general information on the hazards of the chemicals.

All labels must be in good condition and readable, and the label content at least in English, and the label must be easily seen by employees.

Let's look at an example (next slide)

Slide 5

When you look at a label on a container with a chemical inside, you should be looking for a few key pieces of information to help you better understand what the chemical is and what pre-cautions you should take when handling it for your job. Here is a picture of a label on a container of "Microtox Plus" a liquid sanitizer. Microtox Plus is the product identifier, and below it in the circle is the word "Danger". The word danger is called a "signal word" – meant to tell us we need to take special precautions when working with this chemical. On the far left side of this label, we see 3 red diamonds with pictures inside. These images are called "pictograms" and these images alert us to important additional information about this chemical. These 3 things: a product identifier, a signal word, and pictograms are 3 of 6 things required to be listed on a chemical label. Let's zoom in and look a little closer at some of these terms.

Slide 6

You may have noticed that red diamond with a black exclamation point inside it. This image is called a "pictogram" and is designed to call your attention quickly to notice there may be something harmful about this chemical and you need to take precautions to protect yourself when using it. There are 9 pictograms that you might see on containers of chemicals at your facility, and we will look at them next:

Slide 7

Here are the 9 pictograms that you will likely see on containers of sanitation and cleaning chemicals at your facility. Let's look at a few together:

The Health Hazard pictogram (circle) – stands for a chemical that can cause serious harm to your health. This health effect may be delayed over time. An example would be something like formaldehyde gas – which could lead to cancer.

The Exclamation Mark pictogram (circle) – stands for a chemical that might be an irritation to the eyes, skin, or throat/lungs. It could also cause dizziness or loss of balance. An example would be quaternary ammonia.

The Corrosion pictogram (circle) – stands for a chemical that will cause permanent tissue damage on contact. This could be a burn to your skin or blindness if you got the chemical in your eye. An example of a chemical commonly found in the sanitation process that has this hazard characteristic is an acid.

The Flame over Circle pictogram (circle) – stands for a chemical that may increase the amount of oxygen in the air, which could make something catch fire and burn more rapidly and easily. This is a very common symbol you will see on sanitation chemicals and it is important to know that mixing chemicals together incorrectly could cause an explosive fire. An example is hydrogen peroxide.

Slide 8

In addition to the product identifier, the signal word – which will either be “Danger” or “Warning” – and the pictograms, 3 other elements are required by law to be on the original label of the chemical that was shipped to the employer. These are Hazard Statements, Precautionary Statements, and the name, address, and telephone number of the chemical manufacturer.

Hazard Statements are phrase(s) that describe the hazards inherent to the chemical. In this example, the hazard statements are located under the signal word of danger, and if we look at the statements, we can see that this chemical can cause fire, that it is harmful if we inhale it or get it on our skin, and that it could cause a burn or irritation to our lungs and throats. The precautionary statements give us simple instructions on what to do to prevent exposure to these hazards and how to handle the chemical appropriately. On this label, the instructions tell us to keep the product in its original container, to wear appropriate protective clothing, gloves, and eye protection, and to flush eyes for at least 15 minutes and then seek medical care if we got it accidentally splashed in our eyes.

At the top of the label, you can see the manufacturers contact information.

Slide 9

Sometimes it may be necessary to transfer chemical product from a larger original container – such as a 55-gallon drum or big tote – to a smaller, more portable container – like a pail or spray bottle. If this is something that occurs in your workplace, there needs to be a procedure in place to make sure that the correct type of smaller container is used, and that the identity of the material – and any hazards associated with it – is known. This means a proper label must be attached to the smaller, portable container if the chemical material isn't going to be used immediately and fully by the person who made that transfer. The label must have the identity of the chemical, and either words, pictures or symbols that provide information to the user about the hazards of that chemical.

Always contact your supervisor for assistance first before making the transfer. They should be able to supply you with the correct container.

Slide 10

Let's look at this situation. In the picture on the left, you can see two containers with liquid – a clear measuring cup and a large yellow soaking tub. The employee has taken a small amount of chemical product from the yellow tub and placed into the clear measuring cup so that he can dip his cleaning brush into the cup for easy use while he cleans these metal parts. As long as he retains control of that measuring cup and uses the product entirely (or disposes of it), this measuring cup could be unlabeled.

This is acceptable IF your workplace allows this – not all workplaces allow unlabeled containers. Make sure to ask your supervisor whether this is allowed in your workplace, or if a specific, labeled container should be used instead.

The picture on the right with the yellow bucket and measuring cup with a green liquid was taken when they were not actively being used by an employee and were just left unattended on a table. (Float in

figure) It is unclear as looking at this photo what chemical products are contained in the yellow pail and measuring cup. Because the containers are not properly labeled and there is no one in control of the containers, this could lead to injury or illness for another employee who comes along and mistakes the contents of the containers.

The best work practice is to always label containers or use pre-labeled containers to prevent mishandling of chemicals. Again, ask your supervisor for assistance and your specific workplace rules.

Slide 11

Besides being properly labeled with the identity and hazard warnings of the chemical contained in the secondary or smaller container – it is important that the correct container be used for this transfer. For example, food or beverage containers – such as the water bottle pictured here on the right that was repurposed to hold glass cleaner – should never be used for this type of secondary container for 2 reasons. Can you think of what could go wrong here? One error might be that the chemical is accidentally consumed by someone who isn't aware that the water bottle now contains glass cleaner instead of water, and the second concern is that plastic of the water bottle may not be strong enough or appropriate to contain the chemical safely. This is especially important if the chemical put into a new, smaller container is caustic or acidic, or reacts with air, water or metals in a dangerous way. If you need a smaller container for your sanitation chemicals, your employer should be providing appropriate containers and labels, such as the picture on the left.

Slide 12

You may have seen a binder of documents in your workplace that is labeled "Safety Data Sheets". Safety Data Sheets – or SDSs - provide information about the properties and hazards of chemicals used in the workplace. When we understand the hazards of the chemicals we are using for our job, it allows us to better protect ourselves while we complete our tasks. SDSs can be useful and should be reviewed prior to starting any job that requires the use of a chemical. It's best to learn how to respond if you have any accidental exposure or spill BEFORE it happens so you can react quickly. SDSs can sometimes be tricky to read or understand because they may use terms you haven't heard before; if you have questions, it is important to ask your supervisor.

Slide 13

Safety Data Sheets give information about the name of the chemical, whether the chemical can enter the body through the skin or by inhaling it from the air, the signs and symptoms of exposure, how employees can protect themselves if they are exposed, and explains what to do in emergencies.

The information on an SDS follows a standardized order, so that no matter what chemical is being used, the user could always look at the same section on each SDS to find the same type of information. This approach is used by companies worldwide to keep consistency for everyone no matter where the

chemical is produced or what country it is used in, and this is called a Globally Harmonized System (or GHS).

Slide 14

There are 16 required sections to an SDS. These sections will always be in the same order, and are used to quickly find the information you are looking for about a specific chemical. A few of the ones that are most relevant to understand during your work in food plant sanitation are:

1. Identification of the substance or mixture and of the supplier
2. Hazard identification – which will include the signal word and pictograms
3. Composition/information on ingredients
4. First-aid measures
8. Exposure controls and personal protection
10. Stability and reactivity

Slide 15

Now let's look at this example SDS together. First, we might want to know WHY we are using a certain chemical, and then we might want to know if it could hurt us if we accidentally got it on our body while using it, and what we should do next. The first sections of an SDS should answer those 2 questions for us. Here we have an SDS for sodium hypochlorite (or bleach) – a common sanitizing chemical in the food industry. Section 1: identification is shown from this SDS on the left.

Chemical exposures can cause many different health effects or symptoms. Exposure to some chemicals may cause dizziness or breathing problems right away. Other chemicals, if they get on your skin, can immediately cause a severe burn or destroy your skin tissue. These are IMMEDIATE or acute effects. Section 2 of an SDS will always address the hazards of the chemical. On this SDS for sodium hypochlorite, we can see from the hazard statement (located under the pictogram) that it can cause severe skin burns and eye damage.

Slide 16

Section 4 of an SDS will outline the basic first aid measures to be taken if the chemical is accidentally splashed or spilled on the skin, inhaled from the air, or ingested. Many of these basic first aid steps should be completed right away – but sometimes these measures are not enough and additional medical treatment may be needed. It is VERY important to tell a supervisor right away if you have symptoms or exposures – even if you self-treat yourself – because some health effects are delayed and your employer needs to ensure they provide the correct follow-up care for you. Remember, you cannot be punished by an employer for reporting a workplace safety or health concern!

Slide 17

Section 8 of an SDS will guide us in making appropriate choices for personal protective equipment.

In this example, a respirator or mask is required if levels of sodium hypochlorite in the air exceed a certain amount and become dangerous. Your safety department is in charge of measuring these levels and making that determination.

Based on the severe eye hazard and potential for blindness should sodium hypochlorite be accidentally splashed in the eye, goggles and/or faceshields should be used when handling this chemical, and a working eye wash and drench emergency shower should be available for rinsing if needed.

Gloves, aprons, and coveralls are recommended for skin protection. It's important to use the right type of glove as not all glove materials react the same way when exposed to chemicals. For example, when handling sodium hypochlorite, you wouldn't want to use a leather or cotton work glove since that chemical would soak right through to your skin. Instead, here you can see under "skin" that chemically resistant gloves made of nitrile or neoprene material should be provided and used

Slide 18

All hazardous chemicals used in the workplace should have SDSs stored in a place accessible to you at the jobsite. Your employer should tell you where these SDS's are kept so you can take a look at them if you want or need to, and they should be available easily. They may be kept as paper copies in a binder or folder, or they may be kept electronically on a computer or tablet or other mobile device. If they are kept electronically, access to this system must be provided to you and you must be trained by your employer on how to access this electronic system.

Slide 19

Hazard communication training is required to be given to employees before they start working with the hazardous chemicals at the worksite. Employees must be retrained whenever new hazards are introduced into the work site, or if it appears an employee needs a refresher training. Training does not need to be performed if a replacement chemical is going to be used that is similar to existing chemicals.

Additionally, if outside contractors or personnel come into the facility, they must be given site specific information regarding the hazards of the facility. The facility's hazard communication program also needs to include methods on how contractors or outside personnel can find and use SDSs. The facility must also instruct contractors on what to do in case of an emergency.

In summary, prior to being asked to use any chemical in the workplace, an employer is required to tell you about the chemicals you will be using, how to use them safely, what to do in an emergency, and where to find these safety data sheet documents in your workplace. Always remember to ask questions if you are unsure of how to properly handle chemicals in your workplace.

Slide 20

This concludes the general introduction into OSHA's Hazard Communication Standard. Although we covered a lot of material, there is still more to know! For example, your employer must also provide training on which specific sanitation tasks you will complete, and which specific chemicals you will use and how to use them. You should be told where the location of the safety data sheets are kept, and how to access them if you have questions. Your employer should provide personal protective equipment for you to use on your body to protect you from these sanitation chemicals and you should be trained on how to obtain replacements and how and when to use this equipment. And finally, if chemicals are transferred from big containers to smaller ones, your employer needs to discuss how labeling on these containers should take place.

If you have any questions about the material that was covered during this training module, please ask your supervisor for assistance.

Slide 21

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