



"Safety Comes First"

Case Western Reserve University Environmental Health and Safety

June/July
2023

2220 Circle Drive, Service Building, 1st Floor

Phone: (216) 368-2906/2907

FAX: (216) 368-2236

Website: case.edu/ehs

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We have recently received a letter from Daniels, the infectious waste disposal company responsible for managing biowaste on our campus. They have requested that we inform everyone to not dispose of any materials containing iodine in the biowaste. To spread the word, we kindly ask that you include the following notice in your respective newsletters and distribute it among your members. Once you do, please send us a copy for our records. Thank you for your cooperation. CWRU was not the company that prompted this notice.

Message: Iodine is often used to disinfect wounds and other medical equipment, but it's important to dispose of it safely to avoid contaminating the environment. Improper disposal of iodine in a pathological incinerator can create a cloud of iodine that settles on nearby land and causes harm. Please collect iodine containing solutions and contaminated materials for disposal through the CWRU Hazardous Waste program. To make sure we're handling infectious waste containing iodine properly, please keep these tips in mind:

- When sending iodine containing materials to the CWRU hazardous waste program, make sure to disinfect them first if the iodine alone isn't enough. Infectious waste can not be sent out through the CWRU Hazardous Waste program.
- Don't mix bleach with iodine solutions, as it creates toxic fumes.
- Consider using alternative disinfectants to replace the need for iodine like hydrogen peroxide or quaternary ammonium compounds.
- Don't autoclave materials containing iodine, since it can create dangerous iodine vapor.
- These precautions help protect the environment, personnel, and ensure the safe disposal of infectious waste and iodine. Thanks for doing your part to keep everyone safe and healthy!

For additional information and training on how to use the disposal system, please contact CWRU EHS at 216-368-2907.

Marc Rubin

Executive Director, EHS

Forklifts: Tips For Safe Operations At Loading Docks



*Make
sure the
load is
within
the
forklift's
rated
capaci-
ty..."*

Loading and unloading materials with a forklift at loading docks requires special skills and a good deal of concentration. There are a lot of distractions at the dock that make for unpredictable or unsafe conditions. Dock plates that are badly placed or poorly secured, unprotected dock edges, and unstable truck trailers are common conditions that cause forklift injuries, and even death, from forklift tipovers.

Always conduct the following safety checks before you enter a truck trailer or railroad car with a forklift:

The first thing to check is that the truck trailer's rear wheels are chocked and the brakes are set to stop the trailer from rolling. **[Make sure wheel stops are in place so the railroad car doesn't move.]**

If the truck trailer isn't attached to the truck cab or tractor, make sure fixed jacks are in place to prevent the trailer from upending during loading or unloading.

Make sure the dock plates are strong enough to carry the fully loaded forklift and that they are securely in place, and completely cover any gaps or space between the trailer and loading dock.

Inspect the floor of the trailer to be sure it will support the forklift and load. Make sure there are no broken boards or cracked surfaces, no spills or leaks, and no large areas of the floor that are not supported by cross-members or another structural support.

Make sure the entry door of the loading dock and the truck trailer door are high enough to clear your forklift mast when it's raised high enough to carry a load.

When you are loading or unloading:

Make sure the load is within the forklift's rated capacity, is stable while sitting on the forks, and can be centered directly over the forks. If a load is loose or uneven, stack or tie the loose items together so they don't shift or fall.

Drive straight across the dock plates when entering or exiting the truck trailer or railroad car, not at an angle.

Use dock lights and headlights when working in a dark trailer.

Sound the horn when going into or coming out of the trailer.

There are hazards when operating a forklift near loading docks when there is no parked truck trailer or railroad car.

When operating near the exposed edge:

Keep a safe distance from the edge of the loading dock. A good rule of thumb is to make sure no part of the swinging radius of the forklift can reach the edge of the dock.

Watch out for "tail swing." Remember the rear of the forklift has a very wide-swinging radius when you turn. It's easy to lose sight of your position and swing right off the edge of a loading dock that has no visible barriers.

Keep floors around the dock clear and clean so there are no obstacles or surprises in your area of operation.

Keep an eye on the painted edges of the loading dock as a point of reference to gauge your distance when maneuvering near the edge.

Source: Safety BLR

Managing Risks from Methylene Chloride

In April 2023, EPA proposed a prohibition on most uses of methylene chloride to protect human health.

EPA's proposal would:

- Prohibit manufacturing, processing and distribution of methylene chloride for all consumer uses
- Prohibit most industrial and commercial uses of methylene chloride
- Create strict workplace protections to ensure that for the remaining uses, workers will not be harmed by methylene chloride use.

Require manufacturers (including imports), processors, and distributors to notify companies to whom methylene chloride is shipped of the prohibitions and to keep records.

Most of these changes would be fully implemented in 15 months and would amount to a prohibition of an estimated 52% of annual production volume for end uses subject to TSCA. For most uses of methylene chloride that EPA is proposing to prohibit, EPA's analysis found that alternative products with similar costs and efficacy to methylene chloride products are generally available.

For the industrial manufacturing, industrial processing, and federal uses that EPA is not proposing to prohibit because EPA believes that exposures can be prevented, EPA is proposing a workplace chemical protection program (WCPP) with strong exposure limits to protect workers. EPA has already received data from industry that indicate some facilities may already be meeting or able to meet the proposed methylene chloride exposure limits. These proposed requirements would allow the continued processing of methylene chloride to produce chemicals that are important in efforts to reduce global warming outlined in the American Innovation and Manufacturing Act. Climate-friendly refrigerants and other chemicals play a significant role in combatting climate change and EPA's proposed rule supports continued efforts to reduce emissions.

The proposed risk management rule is based on EPA's June 2020 TSCA section 6 risk evaluation, as amended by the November 2022 final revised risk determination for methylene chloride.

In the final revised risk determination, EPA determined that methylene chloride as a whole chemical presents an unreasonable risk of injury to human health under its conditions of use. The unreasonable risk determination was driven by 52 of the 53 conditions of use EPA evaluated.

“EPA's proposal would prohibit most industrial and commercial uses of methylene chloride.”



World Environment Day 2023



“Plastic pollution is problematic for many reasons.”

Each year on June 5, World Environment Day is celebrated by millions across the globe, with participation from over 150 countries. The event has been led by the United Nations Environment Programme (UNEP) since its inception in 1973. The day aims to raise awareness on environmental action and the power of governments, businesses, and individuals to create a more sustainable world. Each year, World Environment Day provides a theme to advocate for specific environmental causes. The theme for 2023 is #BeatPlasticPollution.

More than 400 million tons of plastic is produced every year—half of which is single-use plastic products. Of that, less than 10% is recycled. An estimated 19–23 million tons of plastic ends up in lakes, rivers, and seas. Additionally, plastic pollution clogs landfills and is combusted into toxic gas, making it a dangerous threat to the planet.

Plastic pollution is problematic for many reasons. Plastics don’t biodegrade; instead, they break down over time into ever smaller pieces known as microplastics and nanoplastics, which can have countless adverse impacts. Impacts to marine life range from physical or chemical harm to individual animals to wider effects on biodiversity and ecosystem functioning. Pieces of plastic have been found in the digestive system of many aquatic organisms, including in every marine turtle species and nearly half of all surveyed seabird and marine mammal species.

Humans are also at risk from marine plastic pollution. New research shows that people are inhaling microplastics through the air, consuming them through food and water, and even absorbing them through the skin. Personal care products such as facial scrubs, toothpastes, and body washes are a major source of microplastics, specifically microbeads.

Fortunately, many regional and national groups and business are helping reduce the flow of plastic into the ocean—for example, by implementing bans on single-use plastics; business commitments to reduce, redesign, and reuse plastics; community cleanups; curbside initiatives; and municipal bag bans.

You can participate in World Environment Day and join the effort to beat plastic pollution by doing one or more of the following:

Clean a beach or river. If you live close to a body of water, join a beach or river cleanup in your area. You can also start your own and ask friends and family to participate.

Shop sustainably. Next time you’re out shopping, choose food with no plastic packaging, carry a reusable bag, buy local products, and refill containers.

Try a zero-waste lifestyle. Invest in sustainable, environmentally friendly products, including reusable water bottles, food containers, bamboo toothbrushes, and shampoo bars.

Choose plastic-free personal care products. Look for plastic-free face wash, body wash, makeup, deodorant, shampoo, and other products. You can visit www.beatthemicrobead.org/product-lists to see if your product contains microplastics.

To learn about World Environment Day, visit www.worldenvironmentday.global.

Chemical Spotlight: Divinylbenzene

Divinylbenzene is a colorless to pale, straw-colored liquid. It's used in making synthetic rubber, drying oils, polyesters, resins, and ion exchange beads.

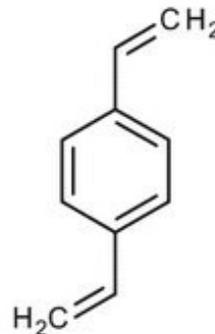
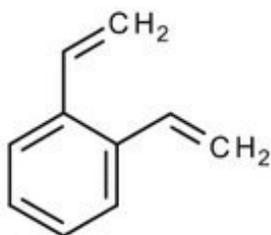
Divinylbenzene isn't compatible with oxidizing agents, strong acids, and metallic salts. Store the chemical in tightly closed containers in a cool, dark, well-ventilated area away from heat. Sources of ignition are prohibited where divinylbenzene is used, handled, or stored.

If divinylbenzene is spilled or leaked, avoid breathing vapors, mist, or gas, and ensure adequate ventilation. Remove all sources of ignition, and evacuate personnel to safe areas. Use personal protective equipment (PPE), including goggles or safety glasses, gloves, flame-retardant protective clothing, and respiratory protection.

Prevent further leakage or spillage if safe to do so, and don't let the product enter drains, sewers, underground or confined spaces, groundwater, or waterways or discharge into the environment. Absorb liquids in vermiculite, dry sand, or earth of a similar material, and deposit in sealed containers. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of divinylbenzene as a hazardous waste. Contact the federal Environmental Protection Agency (EPA) and local environmental regulatory agency for specific recommendations.



"...avoid breathing vapors, mist, or gas, and ensure adequate ventilation."



Fun Page

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Across

2. The EPA proposed a prohibition on most uses of _____ chloride to protect human health.

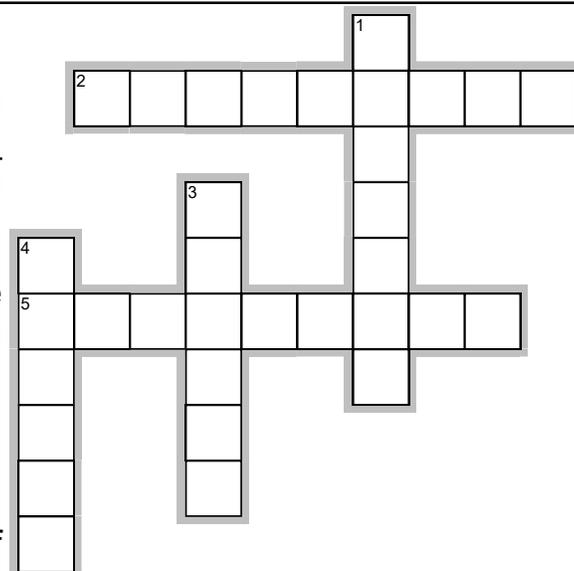
5. Divinylbenzene isn't compatible with _____ agents, strong acids, and metallic salts.

Down

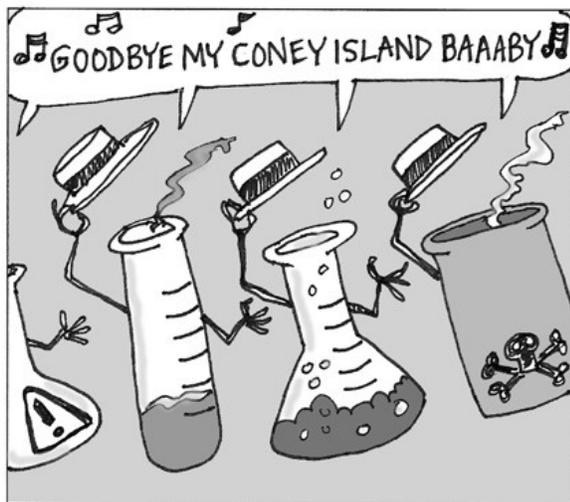
1. More than 400 million tons of _____ is produced every year

3. Remember the rear of the forklift has a very wide-swinging _____ when you turn.

4. _____ is often used to disinfect wounds and other medical equipment.

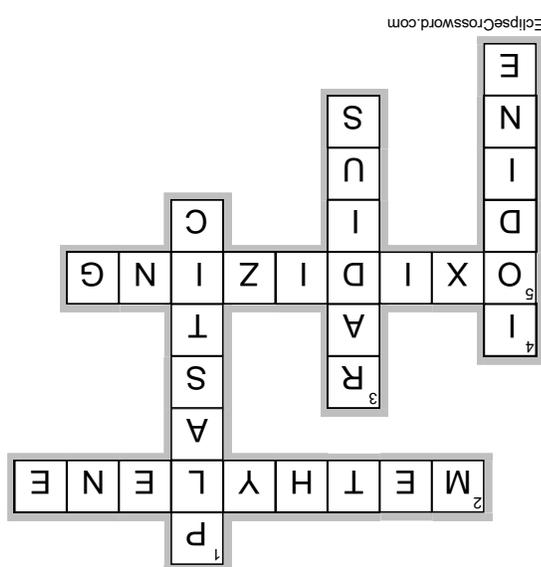


Funny Corner



Harmonizing hazardous substances.

Puzzle Answers



Environmental Health and Safety Staff

Naomi BOLES (neb51), Department Assistant II

Howard CASH (hac70), Safety Specialist Temp

Brad FYE (jxf308), Asbestos and Lead Specialist I

Brandon KIRK (bxk230), Assistant Director, Construction, Facilities, Fire-Life Safety

Kumudu KULASEKERE (kck40), Health Physics Specialist II

Andrew MALAK (apm95), Safety Services Specialist I

Tom L. MERK (tln8), Assistant Director of Safety Services, CSO

Yelena NEYMAN (yxt13), Health Physics Specialist II

Joe NIKSTENAS (jen), Safety Specialist II and LSO

Daniel O'CONNELL (dxo128), Fire Safety Specialist I

Marc RUBIN (mdr6), Senior Director of Safety Services

Dr. Mary Ellen SCOTT (mas35), Safety Services Specialist II

Gayle STARLING-MELVIN (ges83), Clerk III

Felice THORNTON-PORTER (fst2), Assistant Director of Radiation Safety, ARSO

Bo WYSZYNSKI (lxw547), Facilities Safety Specialist I

Andrew YOUNG (aby3), Biosafety Officer



Safety Quotes

*Safety
isn't
expensive,
its
priceless.*

*~Author
Unknown*

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Environmental Health and Safety
Case Western Reserve University
(216) 368-2906/2907 FAX: (216) 368-2236
(email) cwruehs@gmail.com (www) case.edu/ehs

