



Recycling Tidbits

Mercury Containing Devices

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Stump the Grump

Test your mercury knowledge!

1. Mercury weighs ___ times as much as the same volume of water.
2. Mercury constitutes just 0.5 ppm of the Earth's crust, which means that it is scarcer than uranium but more abundant than?
3. Alchemists used to believe that mercury could be turned into gold when combined with ___?
4. Mercury was the primary means of treatment for ___ until the early 20th century.

Answers on page 3.

Mercury, Hg or hydrargyrum is a shiny silvery, fast moving liquid. This attractive element is hard to resist but resist we must. This highly toxic element can find its way into the blood stream through an open wound, inhalation or ingestion. Most notably mercury can cause liver, kidney and nerve damage. Mercury is also horrible for the environment and wildlife. In fact, one gram of mercury is enough to contaminate a 20 acre lake! For these reasons it's important that we carefully and properly dispose of mercury. Mercury can be found in three likely locations in the home or a business; thermostats, thermometers and light bulbs.

Thermostats

Mercury can be found in tilt switches on most thermostats with manual (not electronic/digital) controls. If the thermostat does not contain mercury, remove and properly dispose of any batteries before recycling the thermostat along with other electronics. If

the thermostat has a mercury tilt switch, it should be saved for a hazardous waste collection or taken to one of the following businesses to be recycled.



First Supply Eau Claire
596 Cameron Street
Eau Claire, WI 54703
715-832-6638

Gustave A. Larson Company
2456 Morningside Dr.
Eau Claire, WI 54703
262-542-0200

United Refrigeration
2618 Birch Street Suite B
Eau Claire, WI 54703
715-834-9705

Other drop-off locations for thermostats may be found at www.thermostat-recycle.org/zipsearch/.

Thermometers

Mercury thermometers are made of glass and contain a silver, metallic grey or black liquid. These thermometers are commonly used for fever,

oven, meat or candy temperature readings. If broken, the mercury inside these thermometers (about .5 - 1.5 grams) can pose a real danger to the environment, family members, pets and wildlife. For this reason, mercury thermometers should be disposed of at a hazardous waste collection. To avoid breakage, transport the thermometer in a rigid, sealed container like a small plastic food container.

Alcohol-containing thermometers typically contain red or blue non-toxic liquid and may be thrown in the trash. Digital thermometers contain button batteries which are considered hazardous waste. Once the battery has been removed and set aside for a hazardous waste collection, a digital thermometer may be placed in the trash. Infrared thermometers take instant readings, usually in the ear. These thermometers can go into the trash.

Article continued on page 2.

Mercury Containing Devices Continued



Light Bulbs

Compact fluorescent lights (CFLs) and fluorescent tubes contain mercury in a gas or powder form. There is much less mercury in light bulbs than in thermostats and thermometers, approximately 4 milligrams. However, this isn't a reason to break a bulb and let the gas escape into the air. Inhalation of mercury can be just as toxic as ingestion. In fact the Environmental Protection Agency, has very strict guidelines on cleaning up broken bulbs. As a reminder never use a

vacuum to clean up broken bulbs, this will spread the mercury.

These bulbs should be brought to an Area Collection Station or the Transfer and Recycling Center for proper disposal. A partnership between Focus on Energy and the Dunn County Solid Waste Division allows residents to dispose of CFLs for free. However, they do not cover the cost of disposal for fluorescent tubes, which do incur a small fee per bulb; \$.25 per bulb 4 feet or smaller and \$.50 per bulb over 4 feet.

Broken Bulb Safety Tips

Below are the Environmental Protection Agency's guidelines on cleaning up a broken fluorescent bulb. More detailed information on cleaning up rugs and hard surfaces is available on their website, www2.epa.gov/cfl.

Before Cleanup

- Have people and pets leave the room.
- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
- Shut off the central forced air heating/air-conditioning system, if you have one.
- Collect materials needed to clean up broken bulb:
 - stiff paper or cardboard;
 - sticky tape;
 - damp paper towels or disposable wet wipes (for hard surfaces); and
 - a glass jar with a metal lid or a sealable plastic bag.

During Cleanup

- **DO NOT VACUUM.** Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor.
- Be thorough in collecting broken glass and visible powder. Scoop up glass fragments and powder using stiff paper or cardboard. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Place the used tape in the glass jar or plastic bag.
- Place cleanup materials in a sealable container.

After Cleanup

- Promptly place all bulb debris and cleanup materials, including vacuum cleaner bags, outdoors in a trash container or protected area until materials can be disposed of.

Avoid leaving any bulb fragments or cleanup materials indoors.

- Next, check with your local government about disposal requirements in your area, because some localities require fluorescent bulbs (broken or unbroken) be taken to a local recycling center. If there is no such requirement in your area, you can dispose of the materials with your household trash. Dunn County residents should bring materials to the next Household Hazardous Waste Event, September 9 & 10, 2015.
- If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.



Spring Fun

Enough doom and gloom over mercury. Lets have some fun with ideas for outside.



Make an outdoor music station using finds from the thrift store.

www.funathomewithkids.com

Lay newspaper down before mulching. It will keep weed seeds from germinating. The paper will decompose in 12—18 months.



www.rosemaryonthetv.com



Rocks, paint, tree stump and hours of outdoor fun.

www.chickenscratchny.com

Turn a 55-gallon drum or old pot into a stylish planter! Reclaimed wood on the outside makes this piece eye catching. These planters are great for small trees, shrubs or bushes.



www.instructables.com



Paint coffee cans or other large tin cans. Plant herbs or hanging plants inside for a fun vertical display. This website has a bunch of ideas for reusing items in the garden. I highly recommend checking it out.

www.theendearinghome.com

I couldn't resist the minion! This website has 27 different ideas for planters and lawn décor made from tires. There's also a video to show you how to create a planter.



www.realfarmacy.com

Stump the Grump

Thanks to Live Science and Dartmouth Toxic Metals Superfund Research program, we have some great stump the grump trivia this month! Enjoy.

1. Mercury is really heavy, as it weighs 13.6 times as much as the same volume of water.

2. Mercury constitutes just 0.5 ppm of the Earth's crust, which means that it is scarcer than uranium but more abundant than gold or silver.



3. Alchemists used to believe that mercury could be turned into gold when combined with other metals.

4. Mercury was the primary means of treatment for syphilis until the early 20th century. It was used in the form of pills, calomel, ointments and steam baths. The side effects of this toxic "treatment" included tooth loss, ulcerations, neurological damage and even death, according to the Harvard University Library.

Bonus Mercury facts:

1. The Romans operated mercury mines as punishment institutions for

criminals, slaves and undesirables. Predictably, the prisoners' life span was short due to poisoning.

2. Mercury is the only metal liquid at room temperature.

To learn more visit Live Science online at www.livescience.com or Dartmouth Toxic Metals Superfund Research program, www.dartmouth.edu.

