What’s the Most Dangerous Chemical? The Unlabeled One

WHAT’S AT STAKE?

Unintentional poisonings occur every year across North America. There are thousands of victims. The cause – unlabeled containers that store toxic chemicals!!!

WHAT’S THE DANGER?

Labels work because it tells what the chemical is, what are the hazards and how you can protect yourself.

But the unlabeled container is the culprit!!!

Toxic chemicals often lurk in these unlabeled containers which can cause fatal consequences if ingested.

Here is an unfortunate example:

A 53-year-old metalworker Frank Gabossi drank from a Gatorade bottle that contained a corrosive liquid used to age metal.

Gabossi died two days after accidentally drinking the blue liquid, which contained selenous acid. Police report that he’d ingested a small amount of the toxic liquid before realizing what it was. His co-worker immediately rushed him to hospital, but Gabossi later died.

People should give heed and appreciation of the harmful power and effects of chemicals.

All chemicals used at work, even “household” chemicals, should be considered potentially hazardous. Always understand the hazards of the chemical. Use all chemicals that you have zero exposures.

Chemicals can enter the body through various paths:

- Lungs: inhaling dusts, fumes, vapors, or gases.
- Skin: chemicals coming in contact with skin.
- Digestive system: ingesting chemicals.

Effects of chemical exposure:

- Acute: immediate outcomes upon exposure.
- Chronic: outcome from repeated exposure over longer duration.
- Don’t assume you aren’t being exposed just because you don’t experience immediate health outcomes: it may take days, months, years, to see chronic effects.

HOW TO PROTECT YOURSELF

There are ways to dealing with unintentional poisonings in your workplace. It all has to do with how you treat and respect the full force and power of hazardous and toxic chemicals.

1. Never use a chemical without reading the product’s safety data sheet (SDS) and its label, including instructions for use.
2. If a bottle is unlabeled, leave it unopened. Do not rely on your own senses for determining what chemical you have. Even lifting the lid to sniff certain chemicals is a bad move that could lead to serious respiratory damage.
3. If you find a mystery product in an unlabeled container, tell your supervisor.
4. Don’t leave any unlabeled chemical substance around, even if you know what’s in it. Instead label, return or dispose of it properly.
5. Never place any chemical in anything but its original, labeled container. Taping onto a bottle a piece of paper identifying the product is not enough because the ink can fade or your makeshift label can fall off.
6. Never pour a hazardous product, such as a cleaning solution, into a sports drink container, soda bottle or coffee cup. It’s just too easy for you or a co-worker to mistakenly take a drink from it.
7. Never take a swig from a container that’s not your own. You’re betting your life that what’s in the bottle is what’s advertised on the bottle.
8. Never place food or beverages in a refrigerator used to store hazardous chemicals.
9. Never eat, drink or smoke before washing your hands. Toxic chemicals can be transferred into your body.
10. If you or a co-worker accidentally ingests a chemical from a drink container, call 911 or your poison control center immediately.

There are 2 other preventive and protective measures that must be applied in dealing with dangerous toxic chemicals.

1. How to use chemicals safely:

- **Safety Data Sheet (SDS):** always read these first to learn about how to use the chemical safely and the hazards of the chemical.
- **Substitution:** use a less hazardous chemical to do the job.
- **Ventilation:** use ventilation or work in a well-vented area when using or generating inhalation hazards (welding, spray painting, etc.).
- **Storage:** segregate incompatible chemicals and protect flammable chemicals from ignition sources.
- **Hygiene:** wash your hands after use and prevent chemicals from getting on your clothes.
- **Labeling and signage:** always label containers with their content and hazards.
- **Work practices:** always use chemicals in such a way that minimizes exposure.

2. Select proper PPE when working with chemicals

Gloves:

- Rubber, chemical-resistant

- Nitrile offer the widest range of compatibilities, but…

ALWAYS consult with the SDS to determine which rubber glove to wear.

Eye Protection:

- Safety glasses – when splashing and vapors are not a
- Goggles – when splashing is not a concern, but vapors
- Face shields – when splashing is a concern.
- Use face shields with goggles when splashing and vapors are a

Respirators:

- Only required where airborne chemical concentrations exceed regulatory
- Each type of respirator only protects against specific hazard: solvents, dusts, gases,
- There are additional training and medical examination requirements to respirators.

Body Protection:

- Use to prevent contact to skin or clothes.
- Use rubber, chemical-resistant for liquid
- Can use non-chemical resistant (or simple change of clothes) for
- Protect clothes to prevent “carrying home” chemicals from the job.
- Remove or change before leaving the work

FINAL WORD

There are many hazardous chemicals in the workplace. But the most dangerous of them all is the one in an unlabeled container.