Picture This: Fancy a Cuppa Kerosene?

A woman in Utah was at a BBQ restaurant when she took a drink of what she thought was sweet tea. She immediately spit the tea out and said, “I think I just drank acid.” Within seconds of the sip, her mouth and throat started to burn.

Analysis of the drink revealed the tea had been mixed with the cleaning product, Clean Force Fryer Cleaner, by an employee who thought it was sugar; it has a similar appearance. The cleaning product was made of almost 70% sodium hydroxide (lye), a caustic and dangerous chemical.

According to court documents, in addition to looking like sugar, the cleaning product was shipped to the restaurant in large, unmarked plastic bags placed in cardboard boxes. At some point, the court filing says, a bag of the cleaning product became separated from its cardboard container and it was poured into a new container. The product was then mistaken for sugar and accidentally mixed into a sweet tea drink dispenser. The victim was the first customer of the day to drink the tea.

This incident illustrates just how easily chemicals can be mistaken for common things – in this case sugar. It also shows how these types of mix-ups can happen in most workplaces, even those that don’t seem particularly dangerous.

The rules for labeling and storage of any chemical, including flammable and combustible liquids, are designed to prevent:

1. A catastrophic accident and loss of life due to a fire/explosion caused by flammable vapors or a chemical reaction.
2. Injury or harm.
    1. Death from ingesting/drinking a toxic chemical.
    2. Inhaling noxious fumes that cause long-term health effects or immediate death.

3. Serious burns or blindness if the chemical gets in eyes or contacts skin.

Let’s assume the containers in the picture are filled with gasoline and kerosene. What are some of the finer points when it comes to handling, use, and storage for flammable and combustible liquids?

- Chemical containers must have lids and the lids must be securely closed when the chemical is not being used.
    - Failing to close them allows the flammable vapors escape; and as you likely know, it’s the vapors that can ignite.
    - Open containers can spill or become mixed or contaminated – possibly causing a violent chemical reaction.
- All chemical containers must be properly labeled with a WHMIS or HAZCOM label. All other containers should also be clearly labeled.
- Use safety cans to reduce the risks associated with flammables.
    - Safety cans have a limited capacity (typically not more than 5 gallons/~19 liters);
    - Spring-closing lid and spout cover, mesh flame arrestor screen; and are
    - Designed to safely relieve internal pressure when subjected to heat and fire.
- Look for safety cans that are approved by independent testing agencies such as, Underwriters Laboratory (UL) or Underwriters Laboratory of Canada (ULC).
    - Some local laws and insurance carriers require safety cans to be approved by these testing agencies.
- Finally, check with your federal, provincial, state, and local safety regulations and fire codes for more specific information on requirements for such things as:
    - Maximum allowable quantities of Class I, II, and III flammable and combustible liquids.
    - If containers must be glass, metal, or plastic.

Final Word

Confusing, missing, or damaged labels can easily lead to a dangerous or deadly situation. It’s worth the extra effort to use, handle, and store flammable and combustible liquids safely.

