Cameo Chemicals

- **Open Cameo Chemicals**

Cameo Chemicals is a database that contains over 6000 chemicals and approximately 80,000 alternate/trade names in the database. It also contains information for the 6000 hazardous materials, including fire and explosion hazards, health hazards, firefighting techniques, cleanup procedures, PPE, and chemical properties.

- **Icons**
  - Home
  - Back arrow
  - Forward arrow
  - Print
  - Share dropdown (ALOHA and CAMEO)

- **Search for a chemical**
  - **Search by name**
    - Search by typing Bromine
  - **Search by CAS**- Does anyone know what a CAS number is? Chemical Abstract Service number
    - Search by CAS number 7726-95-6
  - Search by UN/NA Number- What is the UN/NA number?
    - **Search by UN/NA number 1744**

Do you see anything familiar with this page? It is right out of the ERG

What are those placards in the top right? DOT Placards

- **Click the ERG icon or click the ERG Guide 154**

Does this look familiar? (Click the red "X" to close ERG guide 154)

- **Table 1**- What is the isolation distances for a large spill? Protect downwind for a large spill? What are the differences between a large and small spill? Large spill is 55 gallons or more. Why is there a difference between day and night? **Atmospheric mixing is less effective at dispersing vapor plumes at night. It is more likely to continue on a greater distance than to dissipate into the atmosphere.**

- HAZMAT table- Discuss the proper shipping name, Hazard class, and labels. Also point out the DOT placards that may be associated with it.

- **Click CAMEO Chemicals has 2 chemical datasheets**
  - Click view datasheet for Bromine-this opens up the datasheet for **Bromine**
    - Placards-Same as the guide sheet we just looked at
    - CAS number- This is basically the chemicals Social Security number
    - UN/NA- Four digit number
    - DOT Hazard label-Gives you the hazards associated with that particular chemical
    - CHRIS codes- **Who uses this? Coast Guard Why is this important? They do most of their work on or around water, and water is in itself a chemical. Some chemicals are water reactive so it is important to the Coast Guard to have that information.**

- **NFPA 704**
  - Red- What is this? Flammability
  - Blue- What is this? Health
  - Yellow- What is this? Instability/Reactivity
  - White- What is this? Special information

What are those numbers? The higher the number, the higher the risk!

- **General description**- this section tells you about its color, smell and other characteristics.(Read Bromines general description to the class)

- **Hazards**-(Briefly discuss)
  - Reactivity Alerts- Strong Oxidizing Agent
  - Air & Water Reactions
  - Fire Hazard
  - Health Hazard
  - Reactivity profile
  - Reactive groups
  - Potentially Incompatible Absorbents

- **Response recommendations** (Briefly discuss)

- **Physical Properties**- Does this look familiar? NIOSH pocket guide

  - Vapor pressure-If a chemical has 10 or above it is considered high. Bromine is 172 mm Hg @69.08 degrees what would happen to it on a hot day? It would go away pretty quick!
  - Vapor density-A Vapor density means the gas/vapor will rise if it has a vapor density less than 1, if it is greater than 1 it means it will sink

or stay low. Bromine has a VD of 5.51 @ 59.0 degree…what would happen to the gas/vapors? Its going to stay low or sink.

- Molecular Weight- If you don't know the Vapor Density but you have the molecular weight you can divide 159.81 by 29 and for Bromine that would be 5.51. *(29 is the weight of air)*
- IDLH- What does this mean? Immediately dangerous to life and health. It is the maximum concentration from which one could escape within 30 minutes without any impairing symptoms or irreversible health effects.

- **Regulatory information**
  - *Click on what is this information (Briefly discuss)*
  - *Click details about each regulatory field (Briefly discuss)*

  - CAA RMP – Clean Air Act – Risk Management Plan
  - CERCLA = Comprehensive Environmental Response Compensation and Liability Act
  - EHS = Extremely Hazardous Substance
  - TRI = Toxic release inventory
  - RCRA = Resource Conservation and recovery Act

- **Finally alternate chemical names-** in this section you will find alternate and trade names for each chemical you search.

- Scroll back to the top and click the box "Add to MyChemicals". You should see on the left hand side (Blue Section) "chemicals: 1"

- Search for Anhydrous Ammonia and add to MyChemicals, now you should see on the left hand side (Blue section) "chemicals 2"

- **Click on View MyChemicals**- Add water to your list. This is especially important for firefighters to know.

- **Click Predict Reactivity (left hand side)-**

    - Click- How do I read this chart? (Briefly go over it) *(click "How do I read this chart" to make the box disappear)*

Note: If you put your mouse on the reactions it will change it to a pinkish color. If you click that area it will drop the screen to show you a better definition of the particular reaction.

This system only allows for the mixture of 2 chemicals. You can add as many chemicals as you like but it will only show you the mixture of two chemical combinations. When you get this on YOUR own computers you can save and export this chart to your desktop and have it for quick viewing but **DON'T DO IT ON THESE COMPUTERS!**

Questions?