



## Hazard Materials Chemistry: Basic & Applied (80 Hours)

*Instructed by Brian Heinz – Chemical Safety Training*

Hosted by Poudre Fire Authority Hazmat Team  
3400 W. Vine Drive, Fort Collins, CO 80521

**Week 1: Monday, September 12 – Friday, September 16, 2022: 0830 - 1700 (1A)**

**Week 2: Monday, September 19 – Friday, September 23, 2022: 0830 - 1700 (1B)**

**\$1000 Registration includes 2-Week Class & Certificate**

Pre-Requisite: Haz Mat First Responder Operational (FRO)

**[CLICK HERE TO REGISTER](#)**

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This 80-hour Technician-level chemistry program was developed to provide Fire Service, Law Enforcement, Environmental Health agencies, and private industry participants, the knowledge and skills needed to perform as a member of a Hazardous Materials Emergency Response Team.

Week 1 (Module 1A) is an intense introduction to the nature and behavior of chemicals. Instruction begins with discussion on atomic structure and the periodic table of the elements and follows through with over 30 families of organic and inorganic chemical compounds. Emphasis is placed on name and formula recognition, but also the physical and chemical hazards associated with the materials in the event of a spill or emergency. Fire chemistry and the toxic products of combustion are also discussed as it pertains to various elemental fuels, hydrocarbons and organic derivative compounds.

Week 2 (Module 1B) is the practical application of the chemistry learned in the first week. Participants will work in small groups referencing chemical information and characteristics from written texts and other resources. Students will work with the latest computer software programs and for chemical research, compatibility and reactivity data as well as hazardous vapor plume modeling and graphing. Air monitoring and detection devices are discussed and participants will have the opportunity to use the instrumentation. Course also includes a hands-on laboratory field identification/analysis of unknown liquid and solid samples.



*Mr. Brian Heinz has been involved in emergency management since 1986 and has been employed as a full-time emergency management coordinator/instructor for the California Specialized Training Institute. He currently serves as consultant for the Governor's Office of Emergency Services.*