



Due to their unique properties, Sodium and other Alkali metals present many challenges requiring a disciplined approach to develop safe and reliable systems and components. This course will provide the participant with classroom and hands-on knowledge to meet those challenges.



- Hazards associated with handling and using Sodium, Potassium, NaK, and Lithium Metal
- Proper PPE, spill control techniques, and first aid
- Common design approaches for buildings, systems, and equipment used to contain Alkali metals
- What to expect in the event of a water reaction and how to respond
- How to properly prepare for a fire and contain/extinguish small metal fires

This one and one half day course will cover properties, hazards, safety, PPE, emergency response, building characteristics, system design, equipment, and more. It will also include hands-on demonstrations.

Dates and Locations

Tuesday, April 16 2019

9 am – 4 pm

Lunch provided

Day one classroom work will be in New Freedom, PA at a local conference facility – see Course Outline for more details

Group Networking Activity:

6 PM

Dinner

Venue to be determined

Optional

Wednesday, April 17 2019

9 am – 1 pm

Day two hands-on work will be at the Creative Engineers, Inc. facility in New Freedom, PA and will focus on Sodium and NaK (Potassium Sodium Alloy) – see Course Outline for more details

Who Should Attend

Engineers, managers, safety professionals, operators, and fabricators who design or operate systems that contain or use Alkali metals. No technical background is needed to attend this course.

Cost

\$949 per attendee



Course Outline

Day 1

9 am – 4 pm

Classroom work will be in New Freedom, PA at a hotel conference room to be determined based on class size. Lunch will be provided. Topics covered:

- Properties and hazards of Alkali metals
- PPE and first aid
- Fire, spill, and emergency response
- Buildings, equipment, and systems
- Storage and transportation of Alkali metals

An optional group networking activity will be planned for the evening of Day 1.

Day 2

9 am – 1 pm

Hands-on work will be at the Creative Engineers, Inc. facility in New Freedom, PA and will focus on Sodium and NaK (Potassium Sodium Alloy).

- Demonstration of water reaction
- Sodium fire and proper extinguishing technique
- Small spill cleanup
- Cleanup of components used for Alkali metals

**** Attendees that plan to participate in the hands-on portion of Day 2 must wear durable leather closed-toe shoes. All other PPE will be provided.**

About the Instructors

Chad Bohannon, PE has over 15 years of experience in chemical production, operation, safe handling, disposal, and process engineering. Many of his projects involved hazardous materials such as Sodium and other Alkali metals.

Jared Gordon is a chemical engineer with expertise in processes involving liquid metal as well as handling, disposal, and use of Sodium, Lithium, NaK, and other Alkali metals.