Energy Technolgies Area

SAFETY ALERT

November 15, 2022

USE OF LAB COATS

Lab coats are used to cover your regular clothes and minimize chemical contamination and splash hazards while working in the lab areas. They can also provide some temporary protection against fire depending on the type of material the lab coat is made of. Lab coats are not designed to be impermeable to chemicals, but they can provide additional safety since they can be quickly removed to isolate harmful exposures. Lab coat requirements for LBNL are found in the PUB-3000 Chapter 19 Personal Protective Equipment: Lab Coat Selection FAQ's

It is your responsibility to wear proper personal protective equipment when required. This includes the use of lab coats when necessary. Here are some things to keep in mind regarding lab coat use:

- Wear a lab coat when hazards to the body are likely to be present. A good rule of thumb is to wear a lab coat at all times when working in a wet lab area.
- Lab coats made of cotton fabric are recommended for general lab use without fire hazards. Flame resistant fabric (NOMEX®) is required when handling pyrophoric materials outside of a fume hood. Flame retardant cotton fabric is highly recommended when handling flammable solvents or reactive metals. Don't wear lab coats made of synthetic fabrics such as polyester if there is a potential for fire. Synthetic fabrics burn, melt, and stick to skin!
- Wear lab coats completely buttoned up. An open lab coat does not provide protection from hazardous exposures. Don't roll up sleeves for comfort or ventilation.
- Don't wear or store lab coats in non-laboratory areas such as offices or break areas. This can result in the spread of any residual contamination from the lab coat.
- Keep lab coats clean. If they become contaminated or dirty, they should either be disposed of or sent out for cleaning by a professional linen service. Do not take contaminated lab coats home for cleaning.
- Lab coats should be properly stored on a designated hanger in the lab area. Clearly identify the lab coat user to avoid mixing them up. Don't let dirty lab coats pile up on coat racks making cross contamination possible.
- Use a chemical apron when there is a chance of exposure to corrosive materials.

Please contact the ETA Safety Manager, Ron Scholtz X8137 if you have any questions about lab coat requirements.

A Lab Coat Selection Tool can be accessed at: <u>PUB-3000 Chapter 19 Lab Coat Selection Tool</u>

| Lab Coat Material | Features |
|----------------------------------|---|
| Polyester/Cotton Blend | Splash protection, but no specific chemical resistance. |
| | May provide better protection against corrosive |
| | materials than does cotton. Burns readily when ignited |
| | and are not appropriate for use with flammable liquids, |
| | reactive metals, pyrophoric materials, or near open |
| | flame. |
| 100% Cotton | No specific chemical resistance, but may provide better |
| | protection from solvent contamination than corrosives |
| | contamination. No flame resistance but burns less |
| | readily than polyester blends. |
| 100% Cotton with Flame Retardant | No specific chemical resistance, but may provide better |
| | protection from solvent contamination than corrosives |
| | contamination. Appropriate for use in laboratories |
| | where there is fire risk from flammable material |
| | handling, reactive metals or open flame. |
| NOMEX® | NOMEX® is essentially unaffected by most solvents, |
| | and is resistant to attacks by acids and alkalis. |
| | Appropriate for use where there is extreme danger from |
| | open flame, electric arc flash, and pyrophoric materials. |





Cotton NOMEX®