



Lab Coat Considerations

Lab coats are a common sight in laboratories on campus. They protect your skin and personal clothing and are a removable barrier in the event of a spill or splash. However, while common, they still tend to be under-utilized – and in some instances the wrong type of lab coat is used. When choosing a lab coat you need to ask yourself a question – What am I trying to protect myself against? Am I protecting against a flammability hazard, exposure to a toxic substance, a chemical splash, a biological exposure, or am I simply trying to keep my street clothes clean? The type of protection you need will dictate which lab coat you choose.

Flame Resistant – Nomex	Nomex is a meta-aramid synthetic fiber and offers the highest level fire protection in a lab coat. Appropriate for use with pyrophoric liquids and large quantities of flammable liquids where risk of fire is present. The material is intrinsically flame resistant; its protection will not diminish over repeated washes.
Flame Resistant – Cotton	Cotton lab coats that are treated with a flame resistant substance provide a good balance of protection from chemicals (corrosive, solvent) and low-medium fire risk procedures. Unfortunately, the flame retardant properties of the coat may decrease following frequent laundering. Not appropriate for use with pyrophoric materials.
Traditional - Cotton	Coats made from 100% cotton are not as fire resistant as Nomex or treated cotton. But unlike synthetic blend coats, the cotton coat will not melt and adhere to the wearer. Appropriate for general use materials where risk of fire is low. Will provide some protection from chemicals, but may degrade from the exposure.
Traditional - Poly/Cotton Blends	Blended coats will burn and melt (more vigorously the higher the polyester content). Common blends include 80/20 and 65/35 – polyester/cotton. These coats are generally lightweight and resist wrinkles, but do not “breathe” as well as Nomex or 100% cotton coats. They are not appropriate for use with pyrophoric materials or flames.
Barrier – Polyester	Barrier coats are made from 100% polyester and prevent fluid penetration. Primarily used when handling blood borne pathogens or other infectious material. Like other polyester coats, these will readily burn and melt and should never be used with pyrophoric, flammable solvents, or around open flames (e.g. Bunsen burner).

Below are a few additional guidelines and considerations:

1. Wear your lab coat at all times in laboratories to prevent incidental and unexpected chemical exposures to your skin and clothing. A lab coat that is hanging up provides no protection.
2. Keep the coat buttoned and the sleeves rolled down.
3. Make sure you know what applications your lab coat is suitable for. It is likely that you may need more than one type of coat for different activities.
4. Lab coats should be kept in your work area. Wearing the coats outside the lab or work can spread the contamination.
5. Make sure you know how to decontaminate and launder your lab coat.
6. **Lab coats should not be worn in the main elevators.**

Reference lesson learned video and informational blog on the importance of wearing Lab Coats:

<http://blog.chembark.com/2010/09/21/buying-a-lab-coat/>

<http://cenblog.org/the-safety-zone/2014/11/lesson-learned-video-an-acid-spill-without-a-lab-coat/>

Lab Coat Costs (FR = Flame Resistant)

Bulwark Online	Bulwark FR 100% Cotton	\$45.75
Grainger	Workrite FR Nomex	\$181.00
Amazon	Workrite FR Nomex	\$99.91
Amazon	Bulwark FR Cotton	\$68.00
Fisher Scientific	Bulwark FR Nomex	\$169.00
Fisher Scientific	Bulwark FR Cotton	\$75.00
Bulwark Online	Bulwark FR Nomex/ Concealed Snap	\$119.75
Bulwark Online	Bulwark FR Nomex/Button	\$99.50
Bulwark Online	Bulwark FR 88% Cotton	\$68.25

Websites:

<http://www.bulwarkonline.com/c-9-fr-lab-coats.aspx>

[https://static.grainger.com/rp/s/is/image/Grainger/33UD75_AS01?\\$zmmain\\$](https://static.grainger.com/rp/s/is/image/Grainger/33UD75_AS01?$zmmain$)

<http://www.amazon.com/Bulwark-Flame-Resistant-Cotton-Collar/dp/B00HUA4F90>

<https://www.fishersci.com/us/en/catalog/search/products?keyword=nomex+lab+coats&nav>