

Material/Source	Features	Pros	Cons
<p>Polyester/Cotton Blend</p> <p>80% Polyester / 20% Cotton, 65/35, and 40/60 are common blends.</p> <ul style="list-style-type: none"> • Lab Supply Companies • Chemistry Stockroom • Biology Stockroom 	<p>Liquid Resistance Splash resistant. No specific chemical resistance. Anecdotal evidence suggests polyester blends provide better protection against corrosive material than does cotton.</p> <p>Flame Resistance No Polyester blends burn more readily than 100% cotton or flame-resistant materials.</p> <p>Comfort Lightweight and breathable. More cotton in the blend results in better breathability.</p>	<p>Appropriate for use in clinical settings and research laboratories where biological material is manipulated.</p>	<p>Polyester blends burn readily when ignited, and are not appropriate for use with flammable liquids, pyrophoric materials, or near open flame.</p>
<p>100% Cotton</p> <ul style="list-style-type: none"> • Lab Supply Companies • Chemistry Stockroom • Biology Stockroom 	<p>Liquid Resistance Not splash resistant. No specific chemical resistance. Anecdotal evidence suggests cotton lab coats provide better protection from solvent contamination than corrosive contamination.</p> <p>Flame Resistance No Burns less readily than polyester blends.</p> <p>Comfort Lightweight and breathable.</p>	<p>Appropriate for use in clinical settings and research laboratories where there is light flammable liquid or open flame use.</p>	<p>Cotton lab coats should be supplemented with a chemical splash apron when corrosive material is handled.</p>
<p>100% Cotton treated with flame retardant.</p> <ul style="list-style-type: none"> • Lab Supply Companies • Manufacturers of flame-resistant garments. 	<p>Liquid Resistance Not splash resistant. No specific chemical resistance. Anecdotal evidence suggests cotton lab coats provide better protection from solvent contamination than corrosive contamination.</p> <p>Flame Resistance Yes Flame-resistant (FR) fabrics and garments are intended to resist ignition, prevent the spread of flames away from the immediate area of high heat impingement, and to self-extinguish almost immediately upon removal of the ignition source.</p> <p>Comfort Lightweight and breathable.</p>	<p>Appropriate for use in research laboratories where substantial fire risk exists from flammable material handling or open flame use.</p> <p>Laundering will not damage the flame resistant coating.</p>	<p>More costly than a traditional 100% cotton lab coat.</p>
<p>Nomex IIIA</p> <ul style="list-style-type: none"> • Lab Supply Companies • Manufacturers of flame-resistant garments. 	<p>Liquid Resistance Flame Resistance Yes When in contact with direct flame or extreme heat, fibers in the protective clothing enlarge, enabling greater distance between the user's skin and heat source.</p> <p>Comfort Breathable, but slightly bulkier than polyester blend or 100% cotton materials.</p>	<p>Appropriate for use in research laboratories where there is extreme fire danger from open flame, electrical arc flash, and pyrophoric material.</p>	<p>Expensive.</p>

<p>Polypropylene</p> <ul style="list-style-type: none"> • Lab Supply Companies 	<p>Liquid Resistance Not splash resistant.</p> <p>Flame Resistance Not flame-resistant.</p> <p>Comfort Very lightweight and breathable.</p>	<p>Appropriate for use when protection from dirt and grime in nonhazardous environments is desired.</p> <p>Disposable.</p> <p>Low cost.</p>	<p>Offers no protection from hazardous materials.</p>
<p>Microbreathe</p> <ul style="list-style-type: none"> • Lab Supply Companies • Clean Room Supply Companies 	<p>Liquid Resistance Barrier to particles, biological fluids, and chemicals.</p> <p>Flame Resistance Not flame-resistant.</p> <p>Comfort Lightweight, breathable, and stretches to allow ease of movement.</p>	<p>Appropriate for use in clinical settings and research laboratories where biological material and chemicals are handled.</p> <p>Low particle count fabric is ideal for clean room activities.</p> <p>Disposable.</p>	<p>Inappropriate for use in environments with a significant fire danger.</p>