

# FABRIC BURN TEST CHART [dresspatternmaking.com](http://dresspatternmaking.com)

The fabric burn test is best done outside or in a well ventilated room; the smell of synthetic burning fabric can be unpleasant, hazardous and linger. Note that the test is not 100% accurate due to fabrics that are blends. These fabrics will give a result that is a combination of both fibers. Also some fabrics may have chemicals added which also increases the unreliability of the burn test.

## Tools

- ★ fireproof dish (e.g. ceramic, glass, metal tin)
- ★ tweezers
- ★ matches
- ★ water in case you need to put out the fire

## Method

- ★ Cut a small piece of fabric (1 inch square)
- ★ Hold one side with tweezers over fireproof dish
- ★ Light the other end with match
- ★ Let the piece burn completely, dropping the fabric when necessary
- ★ Take note of the smell and the smoke as it burns, BUT do not put the burning fabric directly under your nose
- ★ Leave the residue cool at the bottom of the dish so that you can handle when cool

	Description	Flame & Residue	Smell	Smoke	Ash
Cotton	★ natural cellulose fiber	★ burns quickly ★ may flare ★ no beads remain ★ after burning may continue to glow	★ burning paper	★ grey or white	★ fine and soft ★ easily crumbled
Hemp	★ natural cellulose fiber	★ burns quickly ★ bright flame ★ no beads remain	★ burning leaves or wood	★ grey or white	★ grey
Linen (Flax)	★ natural cellulose fiber	★ takes time to ignite ★ flame is easily extinguished ★ may glow after flame extinguished ★ no beads remain	★ burning paper	★ grey or white	★ fine and soft
Rayon	★ man-made cellulose fiber	★ burns without flame ★ does not melt ★ no beads remain	★ burning paper	★ slightly hazardous	★ soft grey
Silk	★ natural protein fiber	★ burns slowly ★ fabric curls away from the flame ★ leaves a dark crushable bead	★ burned hair or meat	★ little or no smoke	★ dark gritty ash when beads crushed
Wool	★ natural protein fiber	★ burns slowly ★ fabric curls away from bead ★ leaves a brittle crushable bead	★ burned hair or feathers	★ dark smoke	★ gritty powder or dark, brittle, easily crushable bead
Acetate & Triacetate	★ manufactured protein fiber ★ made from xyz	★ flares quickly ★ melts and drips ★ leaves a hard bead that cannot be crushed	★ hot vinegar	★ black hazardous smoke	★ no ash
Nylon & Polyamide	★ synthetic fiber ★ made from petroleum	★ shrinks away from flame ★ melts and drips ★ leaves a hard bead that cannot be crushed	★ odour like celery	★ fume is hazardous	★ no ash
Polyester	★ synthetic polymer fiber ★ made from coal/petroleum	★ burns and melts ★ shrinks away from flame ★ leaves hard brown bead	★ chemical odour	★ black smoke ★ fume is hazardous	★ no ash
Acrylic	★ synthetic fiber ★ made from gas & petroleum	★ flares up, burns quickly ★ shrinks away from flame ★ leaves hard irregular beads	★ acrid odour	★ black smoke ★ fume is hazardous	★ no ash