

		FLAME TYPE	HOW DOES IT BURN?	BURNING SMELL	SMOKE	ASH
CELLULOSE	COTTON	Orange-yellow; unbleached cotton has a slight violet shade at base of flame.	Ignites quickly. Burns steadily. Not self-extinguishing. Can be blown out. Does not fuse or move away from flame.	Burned paper.	Smokes after flames are extinguished; bluish smoke.	Leaves a black ash skeleton; soft, not greasy or crisp.
	FLAX	Orange and yellow; some sparking.	Ignites easily and rapidly, producing a large flame. Not self-extinguishing. Can be blown out. Fiber is crisp near the flame. Does not fuse, melt, or move away from flame.	Grass fire.	Smokes after flames are extinguished; bluish smoke.	Fragile gray ash skeleton.
	HEMP	Yellow in the middle, top, and bottom. Changes to orange.	Ignites easily and rapidly. Not self-extinguishing. No melting.	Burned paper.	Smokes after flame is extinguished; bluish wisps.	Fragile white ash skeleton.
	RAMIE	Yellow at center of flame, orange around edges and top and bottom.	Ignites quickly. Burns very fast. Not self-extinguishing. No melting.	Burned paper.	Smokes after flame is extinguished; wisps of blue smoke.	Fragile black ash.
PROTEIN	SILK	Orange-yellow with an orange top; some sparking.	Ignites easily. Burns unsteadily with a slight crackle. Self-extinguishing. Can't be easily blown out.	Burned hair or burned eggs.	Bluish gray after it's removed from the flame.	Very black, crisp; holds its shape.
	WOOL	Yellow with orange top and purple to blue bottom.	Ignites readily but rapidly self-extinguishes (hard to keep ignited). Burns slowly. Fuses and curls away from the flame. Swells when burning. Long wools crackle.	Burned hair.	Bluish-gray clouds when removed from the flame.	Crisp, black, puffy ash.
	ALPACA	Yellow and gold.	Hard to ignite; won't easily hold a flame. Burns slowly. Fiber bubbles and swells when burning.	Very strong smell of burned hair.	Smoldering smoke; grayish blue and wispy.	Crisp, shiny ash that holds its shape.

Cellulose and protein fiber burn test results from page 57 of McCuin, J. M. (2009). *The intentional spinner: a holistic approach to making yarn*. Loveland, Colo.: Interweave Press.