



Is Your Woven Polypropylene Egg Belt Really Flame Retardant?



We are asked from time-to-time whether Breeders Poultry Belts egg belts are flame retardant, as competitive suppliers will often make that claim. The short answer is no, Breeders Poultry Belts standard products are not flame retardant, but the story does not end there. And if you are evaluating competitive suppliers who claim their egg belts are “flame retardant”, you need to ask additional questions to validate that claim.

Polypropylene, a common thermoplastic, without flame retardant additives is not considered flame retardant. It is slow burning, emitting a black noxious smoke, but will nevertheless burn under the right

conditions. So, the question becomes: can we provide our egg belts in a flame-retardant version and exactly what does that mean?

The fiber produced to make our belts can be formulated with additives to create a flame-retardant product. The standard additive is a brominated/halogenated compound that can be added in various concentrations depending on the end-use requirements. The advantage of this additive is that it is a proven additive and inexpensive. But, some states, like CA consider it a carcinogen. The newer option is a non-halogenated compound that is more stable, not considered a carcinogen, but is more expensive. Depending on the concentration to meet the end use requirements, the additional cost will not be significant in either case, but will nevertheless increase the cost.

A second consideration in creating a flame-retardant product, or if you are purchasing based on a manufactures’ claim their product is flame retardant is what standard applies. There are many standards that could apply, such as FM USS 302, NFPA 701, UL 94, ASTM, etc. Anyone who claims their product is flame retardant should be able supply documentation of what standard it was tested to.

If you are interested in co-developing a flame-retardant egg belt, then we would welcome that conversation. The end user would first need to define what standard would apply. Then we could develop a product that would meet that specification. It would likely only be practical if the volumes justify the cost of development.

In conclusion, do not get fooled by claims that an egg belt from a competitive supplier is “flame retardant”. Insist on documentation which specifies the test method standard. Then, the end user must decide if that is an appropriate standard. Finally, if you are truly interested in buying a flame-retardant egg belt, Breeders Poultry Belts is the perfect partner. We have the technical resources, are the only US manufacturer and are willing to work with customers to solve their egg belt problems...not just sell a product.