

## FLAME RETARDANT FINISH – CONCLUDING PART

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### Flame Retardants for Fibres Other than Cellulosics

- **Wool Fibres** – Hexafluoro zirconate and titanate salt-based flame retardants are used for wool. These can be applied by exhaust and padding processes in acidic medium.
- **Polyester Fibres** – The products used as flame retardants are bromine or phosphorus-based product. These are used as an additive to the polymer melt and there are other methods too.
- **Nylon Fibres** – Main flame retardants for nylon fibres are thiourea based. It has been applied to back coating generally.



### Summary

There are various developments that have happened in flame retardants, like in the area of new technologies, products and materials to meet the challenge and needs of ever-changing safety regulations and to cope with the changing requirements of everyday use. Most of the chemical flame retardants available are non-bio-degradable and pose a serious threat to the environment and also to human life. The carcinogenic nature of flame retardants has led to bans on the application of such chemicals on children wear a long time ago, but the risk of fire on clothing in the household still remains high.

So to deal with this, some work has been done to use a naturally occurring form of clay to impart flame retardants to cotton and poly-cotton fabrics which are the most commonly used material in the field of home textiles. The finish is applied to cotton and poly-cotton by the pad-dry-cure method. However, a lot of further research is required to make the product commercially viable.

Wishing you a great week ahead!

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