



BUTYLATED HYDROXYTOLUENE

Other Names Dibutylhydroxytoluene, 2,6-di-tert-butyl-4-methyl phenol

CAS Number	Substance
128-37-0	Butylated Hydroxytoluene (BHT)

May Be Found In ▪ Plastic packaging such as polybags

Butylated hydroxytoluene (BHT) is used to prevent aging of plastics.

Uses in the Supply Chain

Butylated hydroxytoluene (BHT) is an antioxidant added to plastics such as polyethylene and polypropylene films and polybags to prevent aging.

Why Butylated Hydroxytoluene is Restricted

- BHT is very toxic to aquatic life and also a skin and eye irritant¹.
- BHT can be transferred to the fabric which can react with the nitrogen oxide in the air and in alkaline conditions can form nitrobenzenes. This can cause phenolic yellowing. Although this can occur with all colors, it is most visible with white and pastel colors. Darker colors may appear duller in appearance.
- The solvent in the adhesive tape used to seal the packaging can leach the BHT out of the packaging film and onto the garment.

Sourcing Compliant Materials from Your Suppliers

- Ensure suppliers can provide materials which comply with the Packaging RSL limit of 25 ppm.
- Have your suppliers verify their materials meet the above BHT limits with a certification or, if necessary, by providing a test report from a third-party laboratory.
- Perform risk-based checks of your suppliers' materials by submitting samples to a third-party laboratory for testing to ensure the BHT limits are not exceeded.

Sourcing Compliant Formulations from Your Chemical Suppliers

- Contact your chemical suppliers and explain that you require formulations with no intentionally-added BHT.
- Check the Safety Data Sheet (SDS) of all chemical formulations to ensure that BHT is not listed as an ingredient.
- Perform risk-based checks of your chemical suppliers' formulations by submitting samples to a third-party laboratory for testing to ensure the BHT limits are not exceeded.

Safer Alternatives

- There are many suppliers who can supply "BHT-free" polybags.
- You may need to conduct periodic compliance testing to ensure you obtain BHT-free alternatives.



Chemical Information Document

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Additional Information

Ensure the fabric is slightly acidic (eg pH 6 or slightly lower). Use of acid finishes instead of alkaline and/or apply an acid finish after having applied any alkaline finish will help prevent phenolic yellowing. A cause of alkaline conditions can be insufficient washing out and neutralizing of chemicals used for bleaching and dyeing.

Minimalize the quantity of nitrogen oxide in the warehouse. Nitrogen oxide can be present due to car or truck exhaust, or direct heating in warehouses.

References

¹ European Chemical Agency - Substance Information. <https://echa.europa.eu/substance-information/-/substanceinfo/100.004.439> Retrieved April 2019