

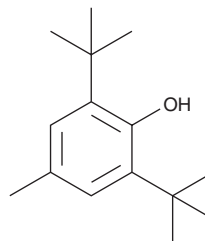
PRODUCT INFORMATION



BHT

Item No. 89910

CAS Registry No.: 128-37-0
Formal Name: 2,6-di-*tert*-butyl-4-hydroxytoluene
Synonyms: Butylated Hydroxy Toluene, NSC 6347
MF: C₁₅H₂₄O
FW: 220.4
Purity: ≥98%
Supplied as: A crystalline solid
Storage: Room temperature
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BHT is supplied as a crystalline solid. A stock solution may be made by dissolving the BHT in the solvent of choice, which should be purged with an inert gas. BHT is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of BHT in these solvents is approximately 30 mg/ml.

BHT is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BHT should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. BHT has a solubility of 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BHT is a synthetic antioxidant.^{1,2} It scavenges peroxide, 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805), superoxide, and ABTS (Item No. 27317) radicals in cell-free assays, as well as inhibits lipid peroxidation of linoleic acid (Item Nos. 90150 | 90150.1 | 21909) *in vitro* when used at a concentration of 45 µg/ml.¹ BHT (0.025-3.2 mM) reduces freeze-thaw-induced malondialdehyde (MDA) production and increases sperm viability in boar spermatozoa preparations.² Formulations containing BHT have been used as antioxidant cosmetic and food additives.

References

1. Ak, T. and Gülçin, İ. Antioxidant and radical scavenging properties of curcumin. *Chem. Biol. Interact.* **174**(1), 27-37 (2008).
2. Roca, J., Gil, M.A., Hernandez, M., *et al.* Survival and fertility of boar spermatozoa after freeze-thawing in extender supplemented with butylated hydroxytoluene. *J. Androl.* **25**(3), 397-405 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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