

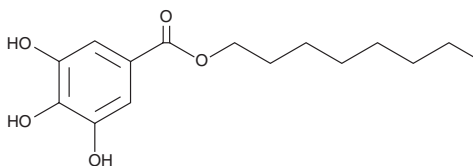
PRODUCT INFORMATION



Octyl Gallate

Item No. 42586

CAS Registry No.: 1034-01-1
Formal Name: 3,4,5-trihydroxy-benzoic acid, octyl ester
Synonyms: Gallic Acid octyl ester, NSC 97419, n-Octyl Gallate, OG
MF: $C_{15}H_{22}O_5$
FW: 282.3
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Synthetic



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

Laboratory Procedures

Octyl gallate is supplied as a crystalline solid. A stock solution may be made by dissolving the octyl gallate in the solvent of choice, which should be purged with an inert gas. Octyl gallate is soluble (≥ 10 mg/ml) in ethanol and DMSO. Octyl gallate is slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Octyl gallate is an antioxidant, antibacterial, and antifungal agent.^{1,2} It scavenges free radicals in a Trolox equivalent absorbance capacity (TEAC) assay when used at a concentration of $10\text{ }\mu\text{M}$.¹ Octyl gallate is active against nine bacterial species (MICs = 12.5-50 $\mu\text{g/ml}$) and the fungi *S. cerevisiae*, *Z. bailii*, *C. albicans*, and *A. niger* (MICs = 25, 50, 25, and 50 $\mu\text{g/ml}$, respectively).² It also inhibits the proliferation of WEHI-231 mouse B cell lymphoma cells ($\text{IC}_{50} = 1.5\text{ }\mu\text{M}$).³ Formulations containing octyl gallate have been used as food additives.

References

1. Wolf, V.G., Bonacorsi, C., Raddi, M.S.G., *et al.* Octyl gallate, a food additive with potential beneficial properties to treat *Helicobacter pylori* infection. *Food Funct.* **8**(7), 2500-2511 (2017).
2. Kubo, I., Fujita, K.-i., Nihei, K.-i., *et al.* Non-antibiotic antibacterial activity of dodecyl gallate. *Bioorg. Med. Chem.* **11**(4), 573-580 (2003).
3. Serrano, A., Palacios, C., Roy, G., *et al.* Derivatives of gallic acid induce apoptosis in tumoral cell lines and inhibit lymphocyte proliferation. *Arch. Biochem. Biophys.* **350**(1), 49-54 (1998).

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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