

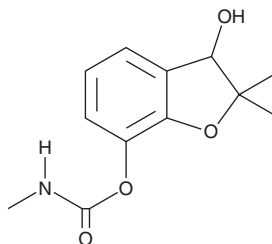
PRODUCT INFORMATION



3-hydroxy Carbofuran

Item No. 24146

CAS Registry No.: 16655-82-6
Formal Name: 7-(N-methylcarbamate) 2,3-dihydro-2,2-dimethyl-3,7-benzofurandiols
MF: C₁₂H₁₅NO₄
FW: 237.3
Purity: ≥98%
UV/Vis.: λ_{max}: 218, 279 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

3-hydroxy Carbofuran is supplied as a solid. A stock solution may be made by dissolving the 3-hydroxy carbofuran in the solvent of choice, which should be purged with an inert gas. 3-hydroxy Carbofuran is soluble in organic solvents such as chloroform and methanol.

Description

3-hydroxy Carbofuran is an active metabolite of carbofuran (Item No. 25635), which is an insecticide that inhibits acetylcholinesterase in mammals and insects.¹ It is a metabolite formed in plants, insects, and mammals.² 3-hydroxy Carbofuran has a half-maximal lethal concentration (LC₅₀) value of 0.75 ppm in *C. pipiens* (mosquito) and an LD₅₀ of greater than 500 mg/kg in *M. domestica*.² It is considered an environmental toxin.³

References

1. Yu, C., Metcalf, R.L., and Booth, G.M. Inhibition of acetylcholinesterase from mammals and insects by carbofuran and its related compounds and their toxicities toward these animals. *J. Agric. Food Chem.* **20**(5), 923-926 (1972).
2. Black, A.L., Chiu, Y.C., Fukuto, T.R., *et al.* Metabolism of 2,2-dimethyl-2,3-dihydrobenzofuranyl-7 N-methyl-N-(2-toluenesulfonyl)carbamate in the housefly and white mouse. *Pestic. Biochem. Physiol.* **3**(4), 435-446 (1973).
3. Gupta, R.C. Carbofuran toxicity. *J. Toxicol. Environ. Health* **43**(4), 383-418 (1994).

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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