PRODUCT INFORMATION

Sedanolide
Item No. 17166

CAS Registry No.: 6415-59-4
Formal Name: 3-butyl-3a,4,5,6-tetrahydro-1(3H)-isobenzofuranone
MF: C_{12}H_{18}O_{2}
FW: 194.3
Purity: ≥95%
UV/Vis.: λ_{max}: 219 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Sedanolide is supplied as a crystalline solid. A stock solution may be made by dissolving the sedanolide in the solvent of choice. Sedanolide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sedanolide in ethanol is approximately 30 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Sedanolide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sedanolide should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Sedanolide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sedanolide is a natural phthalide first isolated from seed oil of the Umbelliferae family, including celery. It induces the expression of glutathione S-transferase and reduces chemical-induced carcinogenesis in mice.\(^1\) Sedanolide inhibits cyclooxygenases-1 and -2 at 250 pg/ml and blocks topoisomerase-I and-II activity at 100 µg/ml.\(^2\) It is mosquitocidal, nematicidal, and antifungal but shows no cytotoxicity against normal mammalian cells.\(^3,4\)

References