

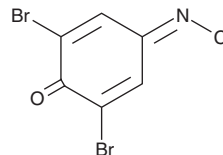
PRODUCT INFORMATION



2,6-Dibromoquinone-4-chloroimide

Item No. 21056

CAS Registry No.: 537-45-1
Formal Name: 2,6-dibromo-4-(chloroimino)-2,5-cyclohexadien-1-one
Synonym: NSC 528
MF: C₆H₂Br₂ClNO
FW: 299.3
Purity: ≥95%
UV/Vis.: λ_{max}: 317 nm
Supplied as: A crystalline 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

2,6-Dibromoquinone-4-chloroimide is supplied as a crystalline solid. A stock solution may be made by dissolving the 2,6-dibromoquinone-4-chloroimide in the solvent of choice, which should be purged with an inert gas. 2,6-Dibromoquinone-4-chloroimide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 2,6-dibromoquinone-4-chloroimide in these solvents is approximately 1, 25, and 30 mg/ml, respectively.

2,6-Dibromoquinone-4-chloroimide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2,6-dibromoquinone-4-chloroimide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 2,6-Dibromoquinone-4-chloroimide has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2,6-Dibromoquinone-4-chloroimide is a colorimetric dye for the detection of phenolic compounds.¹ It produces an indigo dye upon reacting with phenolic compounds at a pH of approximately 9.4. 2,6-Dibromoquinone-4-chloroimide has been used as a Gibbs reagent for the colorimetric detection of phenolic compounds. It has also been used in chromogenic reactions for the quantitative colorimetric detection of aflatoxins, causing colorless aflatoxins to become green with an absorption band at 673 nm.²

References

1. Ettinger, M.B. and Ruchhoff, C.C. Determination of phenol and structurally related compounds by Gibbs method. *Anal. Chem.* **20(12)**, 1191-1196 (1948).
2. Du, B., Su, X., Yang, K., et al. Antibody-free colorimetric detection of total aflatoxins in rice based on a simple two-step chromogenic reaction. *Anal. Chem.* **88(7)**, 3775-3780 (2016).

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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