**PRODUCT INFORMATION**

**Isoxanthopterin**  
*Item No. 17564*

**CAS Registry No.:** 529-69-1  
**Formal Name:** 2-amino-4,7(3H,8H)-pteridinedione  
**Synonyms:** NSC 118090, NSC 614991  
**MF:** C₆H₅N₅O₂  
**Purity:** ≥90%  
**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**

Isoxanthopterin is supplied as a crystalline solid. A stock solution may be made by dissolving the crystalline solid in water. The solubility of isoxanthopterin in water is approximately 5 mg/L. We do not recommend storing the aqueous solution for more than one day.

**Description**

Isoxanthopterin is a natural intermediate in the pteridine pathway, which has roles in pigmentation and cell division. It can be produced naturally from 7-oxobiopterin or in vitro by the oxidation of pterin by xanthine oxidase. Isoxanthopterin is a guanine analog that interferes with RNA and DNA synthesis and can inhibit cell proliferation. Methylated derivatives of isoxanthopterin are fluorescent guanine analogs that are used to study DNA structure.

**References**