

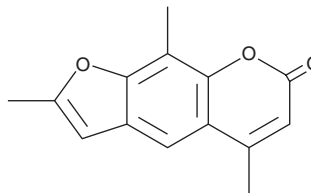
# PRODUCT INFORMATION



## Trioxsalen

Item No. 20044

**CAS Registry No.:** 3902-71-4  
**Formal Name:** 2,5,9-trimethyl-7H-furo[3,2-g][1]benzopyran-7-one  
**Synonyms:** NSC 71047, 4,5',8-Trimethylpsoralen, Trisoralen  
**MF:** C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>  
**FW:** 228.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 250, 291, 335 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

Trioxsalen is supplied as a crystalline solid. A stock solution may be made by dissolving the trioxsalen in the solvent of choice, which should be purged with an inert gas. Trioxsalen is soluble in organic solvent such as dichloromethane.

### Description

Trioxsalen is a derivative of the photoactive probe psoralen (Item No. 11751). Like psoralen, trioxsalen intercalates into DNA and forms DNA single-strand adducts and interstrand crosslinks when activated with ultraviolet light.<sup>1,2</sup> It is used to study DNA structure as well as the cellular response to DNA damage. Trioxsalen and other psoralens photosensitize skin cells to ultraviolet light.<sup>3</sup>

### References

1. McNeill, D.R., Paramasivam, M., Baldwin, J., *et al.* NEIL1 responds and binds to psoralen-induced DNA interstrand crosslinks. *J. Biol. Chem.* **288**(18), 12426-12436 (2013).
2. Iyama, T., Lee, S.Y., Berquist, B.R., *et al.* CSB interacts with SNM1A and promotes DNA interstrand crosslink processing. *Nucleic Acids Res.* **43**(1), 247-258 (2015).
3. Pathak, M.A., Marciani M.S., Guiotto, A., *et al.* A study of the relationship between photosensitizing and therapeutic activity of 4,5',8-trimethylpsoralen, and its major metabolite 4,8-dimethyl, 5'-carboxypsoralen. *J. Invest. Dermatol.* **81**(6), 533-539 (1983).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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