

## Product Information

### 4'-Aminomethyltrioxsalen hydrochloride

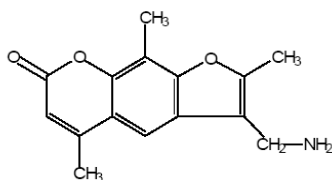
Product Number **A 4330**

Storage Temperature 2-8 °C

CAS RN: 62442-61-9

Synonyms: 4'-Aminomethyl-4,5,8-trimethylpsoralen hydrochloride; 4'-Aminomethyl-4,5',8-trimethylpsoralen hydrochloride; 3-Aminomethyl-2,5,9-trimethyl-7H-furo[3,2g][1]benzopyran-7-one hydrochloride

#### Product Description



• HCl

Molecular formula: C<sub>15</sub>H<sub>15</sub>NO<sub>3</sub> · HCl

Formula weight: 293.75

Method of preparation: A 4330 is prepared semi-synthetically by a proprietary method. Other methods of preparation are available.<sup>1</sup>

The class of compounds known as trioxsalens or psoralens are photosensitizers which have been used to alter skin pigmentation.<sup>1</sup> The psoralens are phototoxic and carcinogenic, presumably due to the ability to intercalate into DNA and photo cross-link pyrimidine bases following UVA light activation. Therefore they have been used for the treatment of variety of epidermal proliferative diseases.<sup>2</sup> Psoralens are also used for inactivation of DNA and RNA viruses (including HIV-1) by nucleic acid cross-linking, followed by UV light irradiation.<sup>3,4,5</sup>

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material

Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

The product is soluble in H<sub>2</sub>O at 1 mg/mL, yielding a clear faint yellow solution with a few particles, and in DMSO at 2 mg/mL, yielding a clear faint yellow solution. It is also soluble in methanol at 5 mg/mL (with heat), yielding a hazy faint yellow solution with many particles, and in chloroform at 5 mg/mL (with heat), yielding a turbid faint yellow solution. The product may contain ~2% ethanol and ~0.5% diethyl ether.

#### Storage/ Stability

This product is light-sensitive and should be stored desiccated, protected from light at 2-8 °C. Under these conditions the product is stable for 3 years.

#### References

1. Isaacs, S.T., et. al., Synthesis and characterization of new psoralen derivatives with superior photoreactivity with DNA and RNA., *Biochemistry*, **16**, 1058-64 (1977).
2. Zarebska, Z., et al., PUVA (psoralen + UVA) photochemotherapy: processes triggered in the cells., *Farmaco*, **55**, 515-20 (2000).
3. Lubaki, M.N., et. al., A novel method for detection and ex vivo expansion of HIV type 1-specific cytolytic T lymphocytes. , *AIDS Res. Hum. Retroviruses*, **10**, 1427-31 (1994).
4. Tsung, K., et al. Gene expression and cytopathic effect of vaccinia virus inactivated by psoralen and long-wave UV light., *J Virol.*, **70**, 165-71(1996).
5. Margolis-Nunno, H., et al., Psoralen-mediated photodecontamination of platelet concentrates: inactivation of cell-free and cell-associated forms of human immunodeficiency virus and assessment of platelet function *in vivo*., *Transfusion*, **37**, 889-95 (1997).

NDH,PHC 01/05-1

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