8-Methoxypsoralen

Product Number M 3501
Store at Room Temperature

Replacement for Product Number 23,272-6

**Product Description**
Molecular Formula: C\textsubscript{12}H\textsubscript{8}O\textsubscript{4}
Molecular Weight: 216.2
CAS Number: 298-81-7
Melting Point: 148 °C
Extinction Coefficient:
E\textsubscript{\textit{EmM}} = 22.4 (249 nm), 11.5 (300 nm) (ethanol)
Synonyms: 8-MOP; Methoxsalen

Psoralens are naturally occurring substances that appear to serve a defensive role in some plants. Psoralens have been detected in fruit, seeds, leaves, stems, and roots. Psoralens have antiviral, antibacterial, antifungal, and insecticide properties. Psoralens are also germination inhibitors. Naturally occurring psoralens include psoralen, 8-methoxypsoralen, 5-methoxypsoralen, and 4,5',8-trimethylpsoralen. 8-methoxypsoralen is found in the *Ammi majus* plant. *Ammi majus* is known by the common names Bishop's Flower, Bishop's Weed, or False Queen Anne’s Lace.1-7

Psoralens are members of the furocoumarin family of tricyclic molecules with an extended aromatic system which gives rise to strong absorption at certain ultraviolet light wavelengths (320-400 nm). Light activated psoralens can participate in photochemical reactions.8

Psoralens cause light sensitization of human skin. Psoralen photochemistry has been used to study DNA mutation and repair mechanisms. A photocycloaddition product is formed between pyrimidines (primarily thymidine) when a psoralen-DNA intercalation complex absorbs UV radiation.8-12

**Precautions and Disclaimer**
For Laboratory Use Only. Not for drug, household or other uses.

**Preparation Instructions**
This product is soluble in chloroform (50 mg/ml), yielding a clear to slightly hazy, faint yellow solution.

**References**