**Meconin-d₃**  
*Item No. 9001141*

**CAS Registry No.:** 29809-15-2  
**Formal Name:** 6,7-dimethoxy-1(3H)-isobenzofuranone-d₃  
**Synonyms:** NSC 35547-d₃, Opianyl-d₃  
**MF:** C₁₀H₇D₃O₄  
**FW:** 197.2  
**Chemical Purity:** ≥98% Meconin  
**Deuterium Incorporation:** ≥99% deuterated forms (d₁-d₃), ≤1% d₀  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λₓₘₐₓ: 211, 309 nm

**Laboratory Procedures**

Meconin-d₃ contains three deuterium atoms. It is intended for use as an internal standard for the quantification of meconin by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that meconin-d₃ be stored as supplied at -20°C. It should be stable for at least two years.

Meconin-d₃ is supplied as a crystalline solid. A stock solution may be made by dissolving the meconin-d₃ in the solvent of choice. Meconin-d₃ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of meconin-d₃ in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Meconin-d₃ is used as an internal standard for the quantification of meconin by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Meconin, a noscapine metabolite, is a urinary detection marker for illicit opiate misuse. This product is intended for use as a forensic standard.¹

**Reference**


**Related Products**

For a list of related products please visit: www.caymanchem.com/catalog/9001141

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**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**Material Safety Data Sheet**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

**Warranty and Limitation of Remedy**

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

The limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to such material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

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