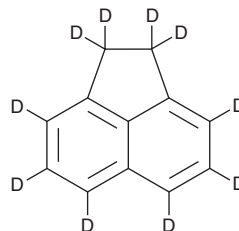


PRODUCT INFORMATION



Acenaphthene-d₁₀ Item No. 38968

CAS Registry No.: 15067-26-2
Formal Name: 1,2-dihydro-d₂-acenaphthylene-d₈
MF: C₁₂D₁₀
FW: 164.3
Chemical Purity: ≥95% (Acenaphthene)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₁₀); ≤1% d₀
UV/Vis.: λ_{max}: 227 nm
Supplied as: A 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

Acenaphthene-d₁₀ is intended for use as an internal standard for the quantification of acenaphthene by GC- or LC-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).

Acenaphthene-d₁₀ is supplied as a solid. A stock solution may be made by dissolving the acenaphthene-d₁₀ in the solvent of choice, which should be purged with an inert gas. Acenaphthene-d₁₀ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of acenaphthene-d₁₀ in these solvents is approximately 2, 30, and 10 mg/ml, respectively.

Description

Acenaphthene is a polycyclic aromatic hydrocarbon (PAH).^{1,2} It has been found in cigarette smoke and sediments in oil-contaminated mangroves.

References

- Oyekunle, J.A.O., Afolabi, F.P., Adenuga, A.A., *et al.* Determination of levels of polycyclic aromatic hydrocarbons in the smoke fractions of popular cigarette brands commonly available in Nigeria. *Chem. Afr.* 5, 201-210 (2022).
- Saunders, D., Carrillo, J.C., Gundlach, E.R., *et al.* Analysis of polycyclic aromatic hydrocarbons (PAHs) in surface sediments and edible aquatic species in an oil-contaminated mangrove ecosystem in Bodo, Niger Delta, Nigeria: Bioaccumulation and human health risk assessment. *Sci. Total Environ.* 832:154802, (2022).

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.

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