

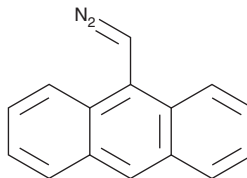
PRODUCT INFORMATION



9-Anthryldiazomethane

Item No. 26806

CAS Registry No.: 10401-59-9
Formal Name: 9-(diazomethyl)-anthracene
MF: $C_{15}H_{10}N_2$
FW: 218.3
Purity: $\geq 85\%$
Ex./Em. Max: 365/412 nm
UV/Vis.: λ_{max} : 255 nm
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

9-Anthryldiazomethane is supplied as a solid. A stock solution may be made by dissolving the 9-anthryldiazomethane in the solvent of choice, which should be purged with an inert gas. A stock solution may be made by dissolving the 9-anthryldiazomethane in the solvent of choice. 9-Anthryldiazomethane is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 9-anthryldiazomethane in these solvents is approximately 30 mg/ml.

9-Anthryldiazomethane is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 9-anthryldiazomethane should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 9-Anthryldiazomethane has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

9-Anthryldiazomethane is a fluorescent probe that has been used for the detection of fatty acids, arachidonic acid metabolites, prostaglandins, leukotrienes, and thromboxanes.¹ It reacts with carboxylic acid groups and produces a fluorescent ester that can be detected via HPLC. 9-Anthryldiazomethane displays excitation/emission maxima of 365/412 nm in 80:20 solutions of acetonitrile:water and methanol:water.² It has also been used to detect amino acids via HPLC with excitation/emission maxima of 255/412 nm, respectively.³ 9-Anthryldiazomethane has been used as a synthetic intermediate in the synthesis of anthracene-containing polymers.⁴

References

1. Yamauchi, Y., Tomita, T., Senda, M., *et al.* High-performance liquid chromatographic analysis of arachidonic acid metabolites by pre-column derivatization using 9-anthryldiazomethane. *J. Chromatogr.* **357(1)**, 199-205 (1986).
2. Nimura, N. and Kinoshita, T. Fluorescent labeling of fatty acids with 9-anthryldiazomethane (ADAM) for high performance liquid chromatography. *Analyt. Lett.* **13(A3)**, 191-202 (1980).
3. Yoshida, T., Uetake, A., Murayama, H., *et al.* Fluorescent labelling of amino acids with 9-anthryldiazomethane and its applications to high-performance liquid chromatography. *J. Chromatogr. A* **348(2)**, 425-429 (1985).
4. Krakovyak, M.G., Anufrieva, E.V., Lushchik, V.B., *et al.* 9-Anthryldiazomethane in the synthesis of anthracene-containing polymers *J. Macromol. Sci.* **A12(6)**, 789-814 (1978).

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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