

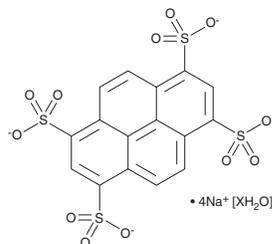
PRODUCT INFORMATION



1,3,6,8-Pyrenetetrasulfonic Acid (sodium salt hydrate)

Item No. 29980

CAS Registry No.: 1771776-02-3
Synonyms: P4S, PTS
MF: $C_{16}H_6O_{12}S_4 \cdot 4Na [XH_2O]$
FW: 610.4
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 236, 245, 273, 284, 375 nm
Supplied as: A crystalline 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

1,3,6,8-Pyrenetetrasulfonic acid (sodium salt hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,3,6,8-pyrenetetrasulfonic acid (sodium salt hydrate) in the solvent of choice, which should be purged with an inert gas. 1,3,6,8-Pyrenetetrasulfonic acid (sodium salt hydrate) is soluble in the organic solvent DMSO at a concentration of approximately 0.5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 1,3,6,8-pyrenetetrasulfonic acid (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 1,3,6,8-pyrenetetrasulfonic acid (sodium salt hydrate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

1,3,6,8-Pyrenetetrasulfonic acid is an intermediate in the synthesis of the color additive pyranine.¹ It has been used to stabilize intermolecular interactions for the crystallization of *L. mexicana* pyruvate kinase.²

References

1. Jitian, S., White, S.R., Yang, H.-H.W., *et al.* Conventional high-performance liquid chromatography versus derivative spectrophotometry for the determination of 1,3,6-pyrenetrisulfonic acid trisodium salt and 1,3,6,8-pyrenetetrasulfonic acid tetrasodium salt in the color additive D&C Green No. 8 (Pyranine). *J. Chromatogr. A* **1324**, 238-241 (2014).
2. Morgan, H.P., McNae, I.W., Hsin, K.-Y., *et al.* An improved strategy for the crystallization of *Leishmania mexicana* pyruvate kinase. *Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun.* **66(Pt 3)**, 215-218 (2010).

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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