

# PRODUCT INFORMATION



## FeTMPyP

Item No. 75854

**CAS Registry No.:** 133314-07-5  
**Formal Name:** [[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetra $\kappa$ N<sup>21</sup>, $\kappa$ N<sup>22</sup>, $\kappa$ N<sup>23</sup>, $\kappa$ N<sup>24</sup>)tetrakis[1-methylpyridiniumato]](2-)]-Iron(5+), pentachloride

**MF:** C<sub>44</sub>H<sub>36</sub>FeN<sub>8</sub> • 5Cl

**FW:** 909.9

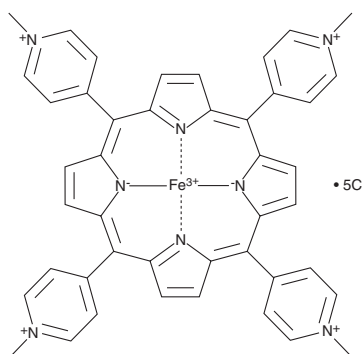
**Purity:** ≥98%

**UV/Vis.:**  $\lambda_{\text{max}}$ : 424 nm

**Supplied as:** A crystalline 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

FeTMPyP is supplied as a crystalline solid. Aqueous solutions of FeTMPyP can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of FeTMPyP in 0.1 M Tris-HCl buffer (1 mM EDTA, pH 9.0) is approximately 12 mg/ml and approximately 10.1 mg/ml in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

### Description

FeTMPyP is a synthetic porphyrin complexed with iron which acts as a peroxynitrite decomposition catalyst. The rate constant for decomposition of peroxynitrite by FeTMPyP  $2.2 \times 10^6 \text{ M}^{-1}\text{s}^{-1}$  with a turnover number of  $360 \pm 170 \text{ s}^{-1}$ .<sup>1</sup> The predominant product (>90%) of this reaction is nitrate, with a minor amount of nitrite also formed (~6%), at pH 7.4.<sup>1</sup>

### Reference

1. Stern, M.K., Jensen, M.P., and Kramer, K. Peroxynitrite decomposition catalysts. *J. Am. Chem. Soc.* **118(36)**, 8735-8736 (1996).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/30/2023

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM