

Frontier Specialty Chemicals, Inc. **Technical Data Sheet** P.O. Box 31 Catalog Number: **T40322**

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For research use only

Not intended or approved for diagnostic or therapeutic use.

Product Name: Fe(III) meso-Tetra (N-Methyl-4-Pyridyl) porphine pentachloride

Catalog Number: T40322

Sizes Available: 100 mg, 250 mg, 1 g, and larger sizes available

Molecular weight: 909.9 g/mol

Molecular Formula: C₄₄H₂₆FeN₈

CAS Number: 133314-07-5

Storage: Store at room temperature and protect from light.

Synonyms: FeTMPyP pentachloride, 133314-07-5, CTK8E8443, DTXSID90849546, Iron(III) meso-tetra(N-methyl-4-pyridyl)porphine pentachloride

Field of Interest: Catalysis, MOF's

Background: Fe (III) meso-Tetra (N-Methyl-4-Pyridyl) porphine pentachloride is a synthetic porphyrin with applications as a peroxynitrite decomposition catalyst, MOF's and as an anti-ischemic agent due to inhibition of reactive oxygen species^{1-3.}

References:

- 1) Peroxynitrite decomposition catalysts: therapeutics for peroxynitrite-mediated pathology, Salvemini, Daniela; Wang, Zhi-Qiang; Stern, Michael K.; Currie, Mark G.; Misko, Thomas P., Proceedings of the National Academy of Sciences of the United States of America (1998), 95(5), 2659-2663 DOI:10.1073/pnas.95.5.2659
- R-Substituent induced structural diversity, synergistic effect and highly selective luminescence sensing for Fe3+ detection by post-synthetically modified Cd-MOFs, Liu, Qing; Tan, Jing-Yi; Zhang, Jian-Yong; Zhang, Na; Deng, Wei, CrystEngComm (2020), 22(22), 3871-3883 DOI:10.1039/d0ce00476f
- 3. Inhibition of reactive oxygen species downregulates the MAPK pathway in rat spinal cord after limb ischemia reperfusion injury, Choi Eun Kyung; Yeo Jin-Seok; Park Chan Yoon; Na Ho in; Lim Jung a; Lee Jeong-Eun; Hong Seong Wook; Park Sung-Sik; Lim Dong Gun; Kwak Kyung Hwa, International journal of surgery (London, England) (2015), 2274-8.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. Fe(III)meso-Tetra (N-Methyl-4-Pyridyl) porphine pentachloride is manufactured, shipped according to standard practices, and intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Frontier Specialty Chemicals, Inc. warrants the product conforms to the specifications stated herein. In the event of nonconformity, Frontier will replace products or refund purchase price, at its sole option, and Frontier shall not be responsible for any other loss or damage, whether known or foreseeable to Frontier. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Frontier assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.