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**Technical Data Sheet** 

Catalog Number: C40018

## For research use only

Not intended or approved for diagnostic or therapeutic use.

Product Name: Fe(III) Coproporphyrin I chloride

Catalog Number: C40018

Sizes Available: 10 mg, larger sizes available

Molecular weight: 743.99 g/mol

Molecular Formula: C<sub>36</sub>H<sub>36</sub>ClFeN<sub>4</sub>O<sub>8</sub>

**CAS Number:** 210537-27-2

**Storage:** Store at room temperature, protect from light

Synonyms: N/A

Field of Interest: Natural Products Synthesis, Metal and Porphyrin based Catalysis

**Background:** Fe(III) Coproporphyrin I chloride is a pyrrole based natural product and fine chemical that is used in catalytic synthesis of fine chemicals and organic compounds. <sup>1,2</sup> Coproporphyrins and their metal ligands also are used as sensitizers in solar cells, and for quantitative analysis and as biomarkers in urinalysis studies of kidney function.<sup>3,4</sup>

References:

- 1) Enthaler, Stephan; Erre, Giulia; Tse, Man Kin; Junge, Kathrin; Beller, Matthias, Biomimetic transfer hydrogenation of ketones with iron porphyrin catalysts, Tetrahedron Letters (2006), 47(46), 8095-8099.
- 2) Vedadi, Masoud; Niesen, Frank H.; Allali-Hassani, Abdellah; Fedorov, Oleg Y.; Finerty, Patrick J., Jr.; Wasney, Gregory A.; Yeung, Ron; Arrowsmith, Cheryl; Ball, Linda J.; Berglund, Helena; et al, Chemical screening methods to identify ligands that promote protein stability, protein crystallization, and structure determination, Proceedings of the National Academy of Sciences of the United States of America (2006), 103(43), 15835-15840.
- 3) Alibabaei, Leila; Wang, Mingkui; Giovannetti, Rita; Teuscher, Joel; di Censo, Davide; Moser, Jacques-E.; Comte, Pascal; Pucciarelli, Filippo; Zakeeruddin, Shaik M.; Gratzel, Michael, Application of Cu(II) and Zn(II) coproporphyrins as sensitizers for thin film dye sensitized solar cell, Energy & Environmental Science (2010), 3(7), 956-961.
- **4)** Li, Jinhua; Cai, Zongwei, Stacking and separation of urinary porphyrins in capillary electrophoresis: Optimization of concentration efficiency and resolution, Talanta (2008), 77(1), 331-339.

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) Coproporphyrin I chloride** 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.