

Frontier Specialty Chemicals, Inc. **Technical Data Sheet** P.O. Box 31 Catalog Number: **C654-3** 

Logan, UT 84323-0031 Phone: 1-435-753-1901

www.frontiersci.com

sales@frontiersci.com

For research use only

Not intended or approved for diagnostic or therapeutic use.

**Product Name: Coproporphyrin III dihydrochloride** 

Catalog Number: C654-3

Sizes Available: 10 mg, 100mg, and larger sizes available

Molecular weight: 727.63 g/mol

Molecular Formula: C<sub>36</sub>H<sub>38</sub>N<sub>4</sub>O<sub>8</sub> • <sub>2</sub>HCl

CAS Number: 14643-66-4

Storage: Store at room temperature, protected from light

**Synonyms:** Coproporphyrin III, 14643-66-4, Zincphyrin, 21H,23H-Porphine-2,7,12,18-tetrapropanoic acid, 3,8,13,17-tetramethyl-, Zinc coproporphyrin III, 3,8,13,17-tetramethylporphyrin-2,7,12,18-tetrapropanoic acid, Koproporphyrin, Koproporphyrin III

Field of Interest: Heme Metabolism, Rare Diseases, Porphyrias, Mitochondria

**Background: Coproporphyrin** a porphyrin based metabolic product of heme catabolism implicated in porphyria diseases and in heavy metal exposure<sup>1,2</sup> The fine chemical has

photosensitizing properties and has shown to form ordered micelles and aggregates under aqueous conditions. <sup>3,4</sup>

## References:

- 1) B Cribier D Rey, G Uhl, C Le Coz, C Hirth, E Libbrecht, D Vetter, J M Lang, F Stoll-Keller, Abnormal urinary coproporphyrin levels in patients infected by hepatitis C virus with or without human immunodeficiency virus. A study of 177 patients, Arch Dermatol, 1996 Dec;132(12):1448-52.
- 2) Mahaffey, Kathryn R.; Capar, Stephen G.; Gladen, Beth C.; Fowler, Bruce A., Concurrent exposure to lead, cadmium, and arsenic. Effects on toxicity and tissue metal concentrations in the rat, Journal of Laboratory and Clinical Medicine (1981), 98(4), 463-81.
- 3) Finlay, Jarod C.; Conover, David L.; Hull, Edward L.; Foster, Thomas H., Porphyrin bleaching and PDT-induced spectral changes are irradiance dependent in ALA-sensitized normal rat skin in vivo, Photochemistry and Photobiology (2001), 73(1), 54-63. DOI:10.1562/0031-8655(2001)073.
- **4)** Brown, Stanley B.; Shillcock, Margaret; Jones, Peter, Equilibrium and kinetic studies of the aggregation of porphyrins in aqueous solution, Biochemical Journal (1976), 153(2), 279-85. Language: English, Database: CAPLUS, DOI:10.1042/bj1530279.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. Coproporphyrin III dihydrochloride 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.