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Frontier Specialty Chemicals, Inc. **Technical Data Sheet**  
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Catalog Number: **SnM321**

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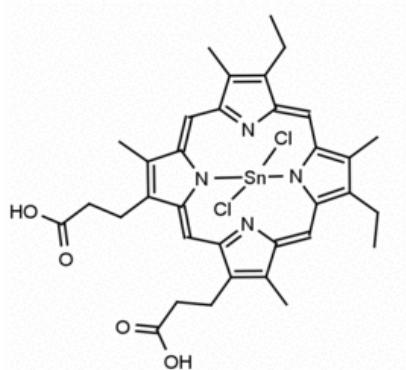
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**For research use only**

Not intended or approved for  
diagnostic or therapeutic use.

**Product Name: Sn(IV) Mesoporphyrin IX dichloride**

**Catalog Number: SnM321**



**Sizes Available:** 5, 10, 25, 50 and 100 mg and larger sizes available, Bulk pricing available

**Molecular weight:** 754.29 g/mol

**Molecular Formula:** C<sub>34</sub>H<sub>36</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>4</sub>Sn

**CAS Number:** 106344-20-1

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

**Synonyms:** Stannsoporphin, tin mesoporphyrin, Tin Mesoporphyrin IX (chloride), Tin(IV) mesoporphyrin IX dichloride

**Field of Interest: HO-1 Inhibitor and Heme Oxygenase Activity**

**Background:** Sn(IV) Mesoporphyrin IX an inhibitor of Heme oxygenase 1 and found active against intracerebral trauma.<sup>1,2</sup> Heme oxygenase and catabolism forms molecular linkage to neuroendocrine function modified by Sn(IV) mesoporphyrin IX, while modifying heme-iron levels in the intestine.<sup>3,4</sup>

**References:**

- 1) Meffert, Mollie K.; Haley, Jane E.; Schuman, Erin M.; Schulman, Howard; Madison, Daniel V. Inhibition of hippocampal heme oxygenase, nitric oxide synthase, and long-term potentiation by metalloporphyrins, *Neuron* (1994), 13(5), 1225-33 Alderton, Wendy K.; Cooper, Chris E.; Knowles, Richard G., Nitric oxide synthases: structure, function and inhibition, *Biochemical Journal* (2001), 357(3), 593-615.
- 2) Wagner, Kenneth R.; Hua, Ya; De Courten-Myers, Gabrielle M.; Broderick, Joseph P.; Nishimura, Robert N.; Lu, Shi-Yi; Dwyer, Barney E., Tin-mesoporphyrin, a potent heme oxygenase inhibitor, for treatment of intracerebral hemorrhage: in vivo and in vitro studies *Cellular and Molecular Biology (Paris)* (2000), 46(3), 597-608.
- 3) Mancuso, Cesare; Kostoglou-Athanassiou, Ifigenia; Forsling, Mary L.; Grossman, Ashley B.; Preziosi, Paolo; Navarra, Pierluigi; Minotti, Giorgio, Activation of heme oxygenase and consequent carbon monoxide formation inhibits the release of arginine vasopressin from rat hypothalamic explants. Molecular linkage between heme catabolism and neuroendocrine function, *Molecular Brain Research* (1997), 50(1,2), 267-276.
- 4) Boni, Roland E.; Boni, Rahel A. Huch; Galbraith, Richard A.; Drummond, George S.; Kappas, Attallah., Tin mesoporphyrin inhibits heme oxygenase activity and heme-iron absorption in the intestine, *Pharmacology* (1993), 47(5), 318-29.

**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. **Sn(IV) Mesoporphyrin IX dichloride** 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.