



FRONTIER
SPECIALTY CHEMICALS
Pure and (not so) simple

Frontier Specialty Chemicals, Inc.
P.O. Box 31
Logan, UT 84323-0031
Phone: 1-435-753-1901

www.frontiersci.com

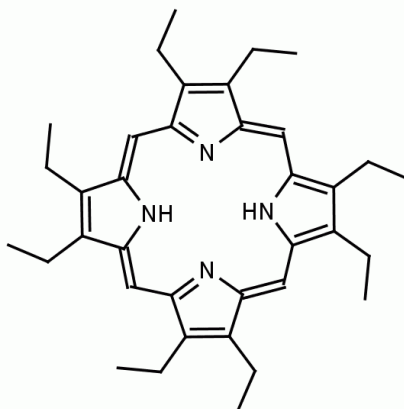
sales@frontiersci.com

Technical Data Sheet
Catalog Number: **O534**

For research use only
Not intended or approved for
diagnostic or therapeutic use.

Product Name: Octaethylporphyrin

Catalog Number: **O534**



Sizes Available: 100, 500 mg, and 1 gram and larger sizes available, Bulk pricing available

Molecular weight: 534.792 g/mol

Molecular Formula: C₃₆H₄₆N₄

CAS Number: 2683-82-1

Storage: Store at room temperature, protect from light

Synonyms: octaethyl porphyrin, octa-ethyl porphyrin, Octaethylpophine, Octaethylporphyrine, [2683-82-1], 2,3,7,8,12,13,17,18-octaethyl porphyrin, 2,3,7,8,12,13,17,18-Octaethyl-21H,23H-porphine

Field of Interest: Natural Products Synthesis, Inflammation Activity, Solar Cells

Background: Octaethylporphyrin (OEP) is a stable porphyrin based natural product and fine chemical that possesses oxygen sensing photophysical properties and can be fabricated into oxygen measuring devices for cell sensing.^{1,2} Metallated OEP has found a variety of uses as sensors including for fluoride ion and for the removal of carbon monoxide by catalysis.^{3,4}

References:

- 1) Wu HD, Xiao Y, Wang FX, Pan GB. Preparation of cocrystal nanofibres of cobalt octaethylporphyrin and tetracyanoquinodimethane with good photoresponse. *J Nanosci Nanotechnol.* 2014 Jun;14(6):4097-100
- 2) Sinkala E, Eddington DT., Oxygen sensitive microwells, *Lab Chip.* 2010 Dec 7;10(23):3291-5. doi: 10.1039/c0lc00244e.
- 3) Kang Y, Kampf JW, Meyerhoff ME, Optical fluoride sensor based on monomer-dimer equilibrium of scandium(III)-octaethylporphyrin in a plasticized polymeric film, *Anal Chim Acta.*, 2007 Aug 29;598(2):295-303., doi: 10.1016/j.aca.2007.07.048.
- 4) Yamazaki S, Yamada Y, Yasuda K., Efficient electrochemical conversion of carbon monoxide by rhodium octaethylporphyrin adsorbed on carbon black. *Inorg Chem.* 2005 Sep 19;44(19):6512-4. doi: 10.1021/ic050911f.

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