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Frontier Specialty Chemicals, Inc. **Technical Data Sheet**
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Catalog Number: **O40969**

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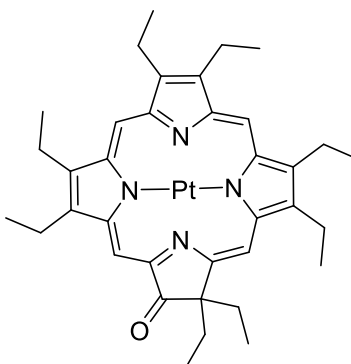
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For research use only

Not intended or approved for
diagnostic or therapeutic use.

Product Name: Pt(II) Octaethylporphine ketone

Catalog Number: **O40969**



Sizes Available: 10 mg and larger sizes available

Molecular weight: 743.85 g/mol

Molecular Formula: C₃₆H₄₄N₄OPt

CAS Number: 172617-46-8

Storage: Store at room temperature and protect from light.

Synonyms: platinum(II) octaethylporphyrin ketone, Pt(II) Octaethylporphine ketone, PtOEPK, CHEBI:52246, [3,3,7,8,12,13,17,18-octaethylporphyrin-2(3H)-onato-kappa(4)N(21),N(22),N(23),N(24)]platinum(II)

Field of Interest: Catalysis and Oxygen Sensors

Background: Pt(II) Octaethylporphine ketone is a synthetic porphyrin found to have optical properties for sensing oxygen and can be incorporated into nanosensors¹⁻³.

References:

- 1) Phosphorescent Complexes of Porphyrin Ketones: Optical Properties and Application to Oxygen Sensing, Papkovsky, Dmitri B. Ponomarev, Gellii V. Trettnak, Wolfgang O'Leary, Paul, *Analytical Chemistry* (1995), 67(22), 4112-17. DOI:10.1021/ac00118a013
- 2) Real-time measurements of dissolved oxygen inside live cells by organically modified silicate fluorescent nanosensors, Koo, Yong-Eun Lee Cao, Youfu Kopelman, Raoul Koo, Sang Man Brasuel, Murphy Philbert, Martin A., *Analytical Chemistry* (2004), 76(9), 2498-2505. DOI:10.1021/ac035493f
- 3) Sergey M. Borisov, CHAPTER 1: Fundamentals of Quenched Phosphorescence O₂ Sensing and Rational Design of Sensor Materials, in *Quenched-phosphorescence Detection of Molecular Oxygen: Applications in Life Sciences*, 2018, pp. 1-18 DOI: 10.1039/9781788013451-00001

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. **Pt(II) Octaethylporphine Ketone** 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.