

FRONTIER
SPECIALTY CHEMICALS
Pure and (not so) simple

Frontier Specialty Chemicals, Inc. **Technical Data Sheet**
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Catalog Number: **Ce6**

www.frontiersci.com

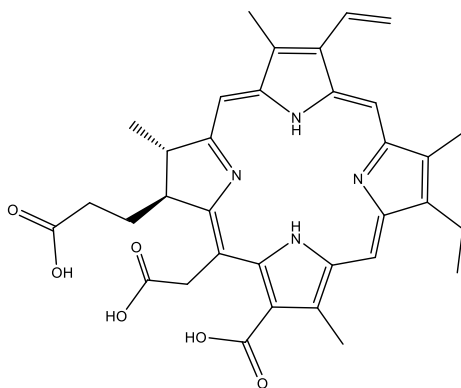
sales@frontiersci.com

For research use only

Not intended or approved for
diagnostic or therapeutic use.

Product Name: Chlorin e6 (Phytochlorin)

Catalog Number: Ce6



Size: 100 mg, 250mg, 1 g, and 5g. Larger quantities available upon request.

Molecular Formula: C₃₄H₃₆N₄O₆

MW: 596.67

CAS No: 19660-77-6

MFCD: MFCD08669566

Storage: Store at -20 °C, protect from light

Purity: 93-98%

Field of Interest: Natural Product, Photodynamic Therapy Agent

Background: Chlorin e6 and chlorin e6 derivatives have potent activity against microbes, cancers cells and enzymes including proteases as cell targets.¹⁻³ As a second generation photosensitizer chlorin e6 also has found use in nanotechnology and as bioconjugates in an array of targeting applications.⁴ Different conjugates have been synthesized with major biotargeting macromolecules including antibodies and have been directed to cells, while the photophysics and cellular binding explored.⁵⁻⁶

References

- (1) Demedova *et al.*, *Antimicrobial Agents Chemotherapy*, **49** 2329 (2005)
- (2) Wang *et al.*, *Biomaterials* **32**, 6145 (2011)
- (3) Choi *et al.*, *Cancer Research*, **66**, 7225 (2006)

(4) Zhu et al., *J. Am. Chem. Soc.* **130**, 130 (2008)

(5) Schmidt-Efurth et al., *British Journal of Cancer* **75**, 54 (1977)

(6) Mojzisova et al., *Biochimica et Biophysica Acta, Biomembranes* **1786**, 2748, (2007).

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the SDS on request. **Chlorin e6** 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.