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Frontier Specialty Chemicals, Inc. **Technical Data Sheet**
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Catalog Number: **C12334**

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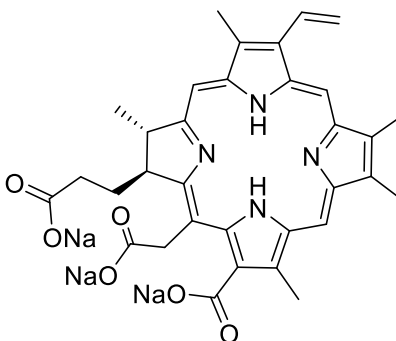
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For research use only

Not intended or approved for
diagnostic or therapeutic use.

Product Name: Chlorin e6 trisodium salt

Catalog Number: C12334



Sizes Available: 100 mg, 250 mg, 1 g, and larger sizes available

Molecular weight: 665.65 g/mol

Molecular Formula: C₃₄H₃₃N₄Na₃O₆

CAS Number: 72984-36-2

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

Synonyms: 21H,23H-Porphine-7-Propanoic acid, 3-carboxy-5-(carboxymethyl)-13-ethenyl-18-ethyl-7,8-dihydro-2,8,12,17-tetramethyl-, sodium salt (1:3), (7S,8S)-

EPA Registry Name: 21H,23H-Porphine-7-propanoic acid, 3-carboxy-5-(carboxymethyl)-13-ethenyl-18-ethyl-7,8-dihydro-2,8,12,17-tetramethyl-, trisodium salt, (7S,8S)-

Field of Interest: Photosynthesis, Photodynamic Therapy, Photovoltaics, Solar Cells

Background: Chlorin e6, trisodium salt, is a natural product derived from plants, and has numerous uses in photodynamic therapy, interactions in the proteome, and has been used in solar cell construction¹⁻⁵.

References:

- 1) Bio-photovoltaic conversion device using chlorine-e6 derived from chlorophyll from Spirulina adsorbed on a nanocrystalline TiO₂ film electrode, Amao, Yutaka; Komori, Tasuku, *Biosensors & Bioelectronics* (2004), 19(8), 843-847 DOI:10.1016/j.bios.2003.08.003
- 2) Human serum albumin complexes with chlorophyll and chlorophyllin, Ouameur, A. Ahmed; Marty, R.; Tajmir-Riahi, H. A., *Biopolymers* (2005), 77(3), 129-136. DOI:10.1002/bip.20173
- 3) Determination of critical concentrations by synchronous fluorescence spectrometry, Yu, Daoyong; Huang, Fang; Xu, Hai, *Analytical Methods* (2012), 4(1), 47-49. DOI:10.1039/C1AY05495C
- 4) Photodynamic effect of novel chlorin e6 derivatives on a single nerve cell, Uzdensky, A. B.; Dergacheva, O. Y.; Zhavoronkova, A. A.; Reshetnikov, A. V.; Ponomarev, G. V., *Life Sciences* (2004), 74(17), 2185-2197. DOI:10.1016/j.lfs.2003.09.053
- 5) Natural chlorophyll-related porphyrins and chlorins for dye-sensitized solar cells, Wang, XiaoFeng; Kitao, Osamu, *Molecules* (2012), 17, 4484-4497, DOI:10.3390/molecules17044484

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 trisodium salt** 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.

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