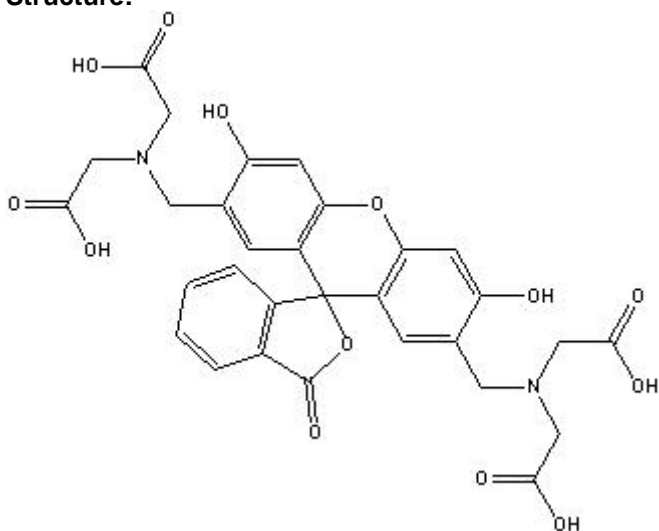


## TECHNICAL INFORMATION

Catalog Number: 195087

**Calcein, Reagent Grade**

**Structure:**



**Molecular Formula:** C<sub>30</sub>H<sub>26</sub>N<sub>2</sub>O<sub>13</sub>

**Molecular Weight:** 622.5

**CAS #** 1461-15-0

**Synonyms:** Fluorexon; 3,3'-bis[N,N'-di(carboxymethyl)-aminomethyl]-fluorescein; Calcein W

**Physical Description:** Yellow-Orange powder.

**Description:** Indicator for the determination of calcium by titration with EDTA. Suitable for fluorometric determination of calcium. It does not fluoresce in strong alkaline solution, but an intense fluorescence appears in the presence of alkaline earths, especially calcium. The yellow green fluorescence disappears instantly with an addition of EDTA. Also in acidic solution, the yellow green fluorescence of Calcein disappears with an addition of copper, zinc and mercury.

**Solubility:** Practically insoluble in water; easily soluble in alkaline solutions to give an orange red solution.

**References:**

- Diehl, H., and Ellingboe, J.L., *Anal. Chem.*, **v. 28**, 882 (1956).
- Wallach, D.F.H., et. al., *Anal. Chem.*, **v. 31**, 456 (1959).
- Yallman, R.G., Bruegeann, W., Baker, P.T., Garn, S.M., *Anal. Chem.*, **v. 31**, 1230-3 (1959).
- Langendorf, H., *Klinische Wochenschrift*, **v. 36**, 829-31 (1958).
- Korbl, J., Vydra, F., Pribil, R., *Talanta*, **v. 1**, 138-41, 281-2 (1958).
- Korbl, J., Vydra, F., *Collection*, **v. 24**, 2623-7 (1959).
- Vydra, F., Markova, V., Pribil, R., *Collection*, **v. 26**, 2449-2452 (1961).
- Ntailianas, H.A., Whitney, R. Mcl., *J. Dairy Sci.*, **v. 47**, 19-27 (1964).
- Ntailianas, H.A., Whitney, R. Mcl., *Chem. Abstr.*, **v. 60**, 9823 (1964).