



**>>Entry Name: Stearoyl 2-lactylate**

**Synonym(s):** 2-(1-Carboxyethoxy)-1-methyl-2-oxoethyl octadecanoate, 9CI. Stearic acid ester with lactic acid bimolecular ester, 8CI

**CAS Registry Number:** 14440-80-3

**Molecular Formula:**  $\text{H}_3\text{C}(\text{CH}_2)_{16}\text{COOCH}(\text{CH}_3)\text{COOCH}(\text{CH}_3)\text{COOH}$

**Molecular Formula:**  $\text{C}_{24}\text{H}_{44}\text{O}_6$

**Molecular Weight:** 428.608

**Accurate Mass:** 428.31379

**Percentage Composition:** C 67.26%; H 10.35%; O 22.40%

**Use/Importance:** Emulsifier

**>>Derivative:** Na salt

**Synonym(s):** Sodium searoyl 2-lactylate

**CAS Registry Number:** 25383-99-7

**Molecular Formula:**  $\text{C}_{24}\text{H}_{43}\text{NaO}_6$

**Molecular Weight:** 450.59

**Accurate Mass:** 450.295732

**Percentage Composition:** C 63.97%; H 9.62%; Na 5.10%; O 21.30%

**Use/Importance:** Emulsifier for foods

**>>Derivative:** Ca salt

**Synonym(s):** Calcium stearoyl 2-lactylate

**CAS Registry Number:** 5793-94-2

**Molecular Formula:**  $\text{C}_{48}\text{H}_{86}\text{CaO}_{12}$

**Molecular Weight:** 895.278

**Accurate Mass:** 894.574521

**Percentage Composition:** C 64.40%; H 9.68%; Ca 4.48%; O 21.45%

**Use/Importance:** Emulsifier for foods; bread additive

**References:**

Thompson, J.B. *et al.*, *Cereal Chem.*, 1954, **31**, 296-302; 1955, **32**, 493-498, (*use*)

*Fed. Regist.*, 1965, **30**, 12070; 1966, **31**, 13793, (*use*)

Elliger, C.A., *J. Agric. Food Chem.*, 1979, **27**, 527-528, (*synth*)