



>>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*)